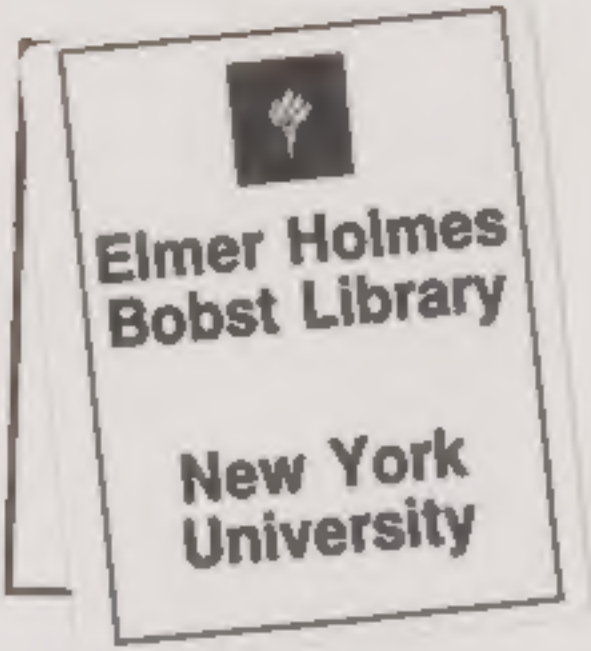
NYU - BOBST
31142 01507 8465
DG269 .M87 1989 Octavian's campaig

NYU
BOBST LIBRARY
OFFSITE


Elmer Holmes
Bobst Library
New York
University

TRANSACTIONS

of the

American Philosophical Society

Held at Philadelphia for Promoting Useful Knowledge

VOLUME 79, Part 4

Octavian's Campsite Memorial for the Actian War

William M. Murray

and

Photios M. Petsas

TRANSACTIONS

of the

American Philosophical Society

Held at Philadelphia for Promoting Useful Knowledge

VOLUME 79, Part 4

Octavian's Campsite Memorial for the Actian War

William M. Murray

and

Photios M. Petsas

THE AMERICAN PHILOSOPHICAL SOCIETY

Independence Square, Philadelphia

1989

Copyright © 1989 by The American Philosophical Society

DG
269
.M87
1989
C-1

Library of Congress Catalog
Card Number 89-84932
International Standard Book Number 0-87169-794-7
US ISSN 0065-9746

TABLE OF CONTENTS

List of Tables . . . v

List of Figures . . . x

Preface . . . xv

I Introduction (William M. Murray) 1

II Octavian's Campsite Memorial for the Actian War
(William M. Murray and Photios M. Petsas)
1. The Ancient Testimonia 9
2. The Rediscovery of the Monument 12
3. The Survey of 1986 22
a. The Sockets and Their Importance 34
b. The Sockets: Methodology of Measurement 42
c. The Sockets: Catalog of Dimensions 48
1) Remarks on the Catalog of Dimensions 49
d. The Profiles of the Sockets 51
e. The Original Number of Rams on the Campsite Memorial 55
f. The Sequence of Construction 57
g. The Photo Mosaic 60
h. The Dedicatory Inscription 62
1) The Dedication Text from Octavian's Campsite Memorial 76
4. The Stoa 77
5. A Reconsideration of the Campsite Memorial 85

III The Relative Sizes of Ancient Warship Rams
(William M. Murray)
1. The Problem of Ancient Ship Classes 95
2. The Ship Classes of the Sockets 99
a. The Significance of the Profiles 100
b. The Weight of the Athlit Ram 103
c. The [illegible] and the Sizes of Suspended Rams 105

1.) The Rams of the Roman Rostra 109
2.) The Sizes of Suspended Rams 110
d. A Tentative Sequence of Ship Classes 113

IV. The Significance of the Campsite Memorial's Design (William M. Murray) 115
1. The Successive Phases of the Rostra 117
2. Octavian's Own Rostra Displays 121

V. Nikopolis, the First Altar and the Dedication of the Campsite Memorial (William M. Murray) 125

VI. New Light on the Battle of Actium (William M. Murray)
1. The Komotau-Lund Debate 131
a. Actium's Battle Strategy 132
b. Numbers of Combatants 133
c. The Use of Fire 134
d. Degree of Destruction 135
e. Military Significance of the Battle 136
2. The Evidence from the Campsite Memorial 137
a. The Numbers of Captured and Destroyed Ships 137
b. The Composition of Antony's and Cleopatra's Fleet 142
c. The "Heavy Fleet vs. Light Fleet" Tradition of the Battle 143

VII. Conclusion (William M. Murray) 153

Bibliography 157

Indices
Index of Modern Authors 163
General Index 165
Index of Ancient Citations 170

LIST OF TABLES

Table 1. Measurement Definitions 41
Table 2. Measurement Procedures .. 43
Table 3. "y to y" Measurements . .. 57
Table 4. The Fragments as Numbered by Gage 62
Table 5. Sizes and Locations of Fragments 73
Table 6. Blocks Reported by Rhomaios in 1922 75

LIST OF FIGURES

Fig. 1. Map showing Actium and Nikopolis xi
Fig. 2. View toward Michalitsi from the south 13
Fig. 3. 1913 view of Philadelphians' Temple
After Frickenhaus 1913, p. 88 . 13
Fig. 4. Corinthian capital found in the 1913 excavations. After
Frickenhaus 1913, p. 89 14
Fig. 5. Rostral monument depicted on a denarius coined in 16
B.C. by C. Antistius Vetustus. Crawford 1974, #485/1.
Plate 53. Photo courtesy of the Staatliche Münzsammlung,
Munich 17
Fig. 6. Stylobate of the stoa from the west 20
Fig. 7. Stylobate of the stoa from the east . 20
Fig. 8a, b. Cuttings in the stylobate's surface 22
Fig. 9. Site plan of the Composite Memorial 24
Fig. 10. Site from the east . 26
Fig. 11. Site from the west . . 27
Fig. 12. Western retaining wall 27
Fig. 13. Southern retaining wall from the east . 28
Fig. 14. Concrete bedding beneath the western retaining wall 28
Fig. 15. Concrete bedding at the east end of the southern retaining
wall . . . 30
Fig. 16. Concrete bedding behind the southern retaining wall at
the southwest corner, view from the southwest. . 30

Fig. 17 Photo-mosaic: sockets [1] to [7] ... 31
Fig. 18 Photo-mosaic: sockets [8] to [17]. ... 32
Fig. 19 Photo-mosaic: sockets [18] to [F] ... 33
Fig. 20 Drawings of sockets [1] to [8] ... 35
Fig. 21 Drawings of sockets [9] to [16] ... 36
Fig. 22 Drawings of sockets [17] to [F] plus hypothetical sockets for the Athlit Olympeion temple and Bremerhaven ram (Ram 1–3) ... 37
Fig. 23 Cross section of the Athlit ram looking aft, taken along the "A" bracket (Fig. 25) ... 38
Fig. 24 Measurements and profiles taken on an average socket ... 39
Fig. 25 The Athlit ram, top and side views ... 40
Fig. 26 The "Measuring Device" in use ... 45
Fig. 27 Profiles of sockets [2] to [5] ... 52
Fig. 28 Profiles of sockets [9] to [16] ... 53
Fig. 29 Profiles of sockets [Aplite] ... 54
Fig. 30 Clamp cutting on the stem block of socket [8] ... 54
Fig. 31 Laying out the camera points with the string triangle ... 60
Fig. 32 Rhomaios' drawing of the inscription blocks. After Rhomaios 1922, Fig. 1 (p. 21) ... 63
Fig. 33 Inscription block #0.27 (course-ribbed block) ... 63
Fig. 34 Inscription block #0.2 (I. VII. 1) ... 65
Fig. 35 Inscription block #0.12 (I. VI. 2) ... 65
Fig. 36 Inscription block #0.15 (II. 30. 1) ... 66
Fig. 37 Inscription block #0.1 (I. VII. 1 A) ... 66
Fig. 38 Inscription block #0.17 (I. VI. 1) ... 67
Fig. 39 Inscription block #0.13 (I. VII. 2 REG) ... 67
Fig. 40 Inscription block #0.10 (I. VII. 2 A) ... 68
Fig. 41 Inscription block #0.22 (I. VII. 1 B) ... 68
Fig. 42 Inscription block #0.20 (I. VI. 3) ... 69
Fig. 43 Inscription block #0.26 (I. VI. 4) ... 69
Fig. 44 Inscription block #0.21 (I. VII. 1 A) ... 70
Fig. 45 Inscription block #0.24 (I. VI. 5) ... 70
Fig. 46 Inscription block #0.25 (I. VI. 2) ... 71
Fig. 47 Column drums showing steps and flutes ... 74
Fig. 48 Column drum showing acanthus ... 79
Fig. 49 Column base ... 80
Fig. 50 Fragment of a lion's head water spout from the roof ... 81
Fig. 51 Marble roofings from the sea ... 81
Fig. 52 Blocks of the stoa's stylobate uncovered in 1974: restored view ... 82
Fig. 53 View from Octavian's campsite looking toward the southeast ... 87
Fig. 54 Restored general view of the monument from the southeast (drawing by Richard A. Scott) ... 88

Fig. 55. Restored view of the monument from the gap between sockets [15] and [A] (drawing by Richard A. Scott) .. 89
Fig. 56: Naval equipment depicted on the triumphal arch at Orange (France), northeast panel. Adapted from AMY 1962, Pl. 24 . . 94
Fig. 57. Rams depicted on the triumphal arch at Orange (France). Adapted from AMY 1962, Pl. 54 .. 102
Fig. 58. The Bremerhaven ram. Photo courtesy of the Deutsches Schiffahrtsmuseum, Bremerhaven . . 104
Fig. 59. *Anaglypha Traiani* relief, right panel (bottom), left panel (top). After HÜLSEN 1886, Figs. 3266 (p. 1298) and 3267 (p. 1305) 106
Fig. 60: The *Rostra Augusti* on the *Anaglypha Traiani* (right panel). Photo courtesy of the German Archaeological Institute in Rome 107
Fig. 61: The *Rostra Aedis Divi Iulii* on the *Anaglypha Traiani* (left panel). Photo courtesy of the German Archaeological Institute in Rome 108
Fig. 62. Hadrianic coin (cf. MATTINGLY 1936, p. 433, #1309 (?) and Plate 81, 10) showing the *Rostra Aedis Divi Iulii*. After HÜLSEN 1886, Fig. 3269 (p. 1305) 110
Fig. 63. The *columna rostrata* of Octavian depicted on a denarius, 29–27 B.C. (cf. SUTHERLAND 1984, p. 60, #271, and Plate 5). Photo courtesy of the American Numismatic Society, New York 112
Fig. 64: The equestrian statue of Octavian (?) on rostra depicted on a denarius minted by Cossus Cornelius Lentulus in 12 B.C. (cf. SUTHERLAND 1984, p. 71, #412, and Plate 7). Photo courtesy of the American Numismatic Society, New York 112
Fig. 65. The "Antonian Rostra" depicted on a denarius minted by Lollius Palikanus in 45 B.C. (cf. CRAWFORD 1974, Vol. 1, pp. 482–83, #473/1). Photo courtesy of the American Numismatic Society, New York 112
Fig. 66. The *Rostra Augusti* depicted on a denarius minted by C. Sulpicius Platorinus in 13 B.C. (cf. SUTHERLAND 1984, p. 73, #406–407). After ZANKER 1988, Fig. 168b (p. 216) 123

For
Suzanne
and
Kate

PREFACE

On October 8, 1980, Mr. [illegible] (then Secretary General of the Greek Ministry of Transport and Communications) reported that shipwrecks from the Battle of Actium had been located at Actium near the entrance to the Ambracian Gulf.[1] Understandably, the news spread quickly throughout the Greek press and was reported the following day by Paul Anastasi in the *New York Times*. Such was the enthusiasm in Greece which greeted this announcement that Prime Minister Georgios Rallis pledged his government's support for a joint Greek-American project to salvage the vessels. Although the story eventually turned out to be false, the degree of interest stirred up by the announcement is remarkable and reveals the abiding notoriety of Antony, Cleopatra and the Battle of Actium.

This book presents what could not be produced in 1980: tangible evidence from warships that participated in the Battle of Actium. Although this time we do not claim to have found any actual ships, we have recovered direct evidence from the bows of Antony's largest ships. This evidence is preserved in one of the most important monuments of the Augustan Age—a memorial built on the site of Octavian's personal camp to commemorate the victory over Antony and Cleopatra in the Actian War. It is our hope that the implications of this monument and the information that it preserves will be carefully debated in the years to come.

For this reason, we have chosen to err on the side of expedience rather than caution in presenting our results. Considering the long history of this monument (which was originally discovered in 1913) and the fact

[1] Paul Anastasi, "Greece Reports Finding Wrecks of Roman Ships [illegible]," *New York Times*, 9 October 1980, p. [illegible] [illegible] Antony and Cleopatra against Octavian [illegible] Ships of the Battle of Actium [illegible] November–December 1980, p. [illegible]

that few scholars know of its existence. We believe it important to publish the results of our investigations quickly. This seemed preferable to a comprehensive consideration of the monument in light of every study dealing with Augustus, Augustan architecture or the Battle of Actium. Since the literature on these subjects is vast, complex and growing at a fast pace, we thought it best to publish our results quickly so that others might debate the evidence. We therefore offer this report in a spirit of humility, understanding that we are just initiating the long process of analysis rather than composing the definitive work on the subject.

Over the years that we have worked singly or together at the site, our work has received the generous support of the Athens Archaeological Society, the American Philosophical Society, the University of South Florida, the Nomos of Preveza, and the American School of Classical Studies at Athens. This book would not have been possible without their help. We express here our sincere thanks to the Greek Archaeological Service for permission to work at the site, to E. Linder and J. Ringel for permission to study the Athlit ram, to J.S. Morrison and J.F. Coates for providing us with specific details about the trireme replica Olympias, to D. Ellmers for providing photos, measurements and cross-sections of the Bremerhaven ram, and to J.R. Steffy for the original pencil drawings behind our Figs. 23 and 28. We also record our sincere thanks and appreciation to all those, too numerous to mention here, who have facilitated our research in Greece and America.

During the process of composition, certain friends and colleagues have helped by commenting on various drafts of this book. We especially thank J.R. Steffy, L. Casson, J.S. Morrison, R.S. Carter, and an anonymous reader who reviewed the manuscript for E.J. Brill. Although we obviously take full responsibility for those errors that remain in the text, it is certain that many errors have been avoided by their thoughtful comments. One must not construe this help, however, as an indication of their support for every argument that appears in this book. All errors in judgment and method remain the responsibility of the authors.

And last, but not least, we thank our wives, without whose support and understanding, neither the research nor the book would ever have been completed. At various times, they endured our long days in the field and tolerated our lengthy discussions about the site during the hot summers of 1986, 1987 and 1988. They also tolerated our absence (both mental and physical) while the manuscript was being written, the plans drawn and the photos printed. For numerous reasons known best to each one of us, we dedicate this book with love and affection to our wives.

The bulk of the sections written by W.M. Murray was initially completed during a [illegible] granted by the Department of History at the University of South Florida [illegible] by the Department of History, the Dean of the College of Social and Behavioral Sciences and the Division of Sponsored Research at the University of South Florida.

Fig. 1

I: Introduction (cf. Fig. 1)

On September 2, 31 B.C., East met West in the last major naval battle of antiquity. Mark Antony, Cleopatra and Octavian played the pivotal roles in a drama that has been retold countless times by historians, playwrights and poets.[1] Although the precise details of the battle fought off Cape Actium are open to debate, there is no doubt about the battle's effect on the subsequent course of Western history. In the succeeding years, Actium's victor, Octavian, evolved from a revolutionary leader into a masterly statesman—one who was actually able to rejuvenate and reform the shattered Roman state. His numerous successes earned him the name Augustus, the praise of his contemporaries, and the admiration of future generations for whom he was the first in a long line of Roman emperors.[2] Because of the importance accorded to the Actian War by every account that chronicles this period, it seems likely that Augustus considered this to be the crucial event in his final rise to power. As Dio observed at the beginning of his fifty-first book, Octavian's monarchy began after his victory at Actium.[3]

Partly because of Actium's importance to Augustus, partly because of the high drama involved, and partly because it represents the last major ancient sea battle, historians have tried for a century to reconstruct what "really happened." Their efforts, unfortunately, have been hampered by the nature of our sources of information. In the years immediately following the battle, Augustus and his followers uniformly described the conflict to their advantage as a heroic struggle between forces of unequal size, patriotism and resolve. And although there is undoubtedly some truth to these accounts, many of the elaborate details are so obviously false that doubt is cast on the straightforward portions of the narrative. Some scholars have even argued that our most detailed accounts should be rejected altogether.[4] For this reason, historians must

[1] The intriguing story of Antony, Cleopatra and Octavian has captured the fascination of modern poets and writers since the time of the Renaissance. For the period between 1540 and 1905 it has been calculated that Cleopatra was the subject of 77 plays, 45 operas and 6 ballets [illegible]. This enduring story was brought to the twentieth century by Bernard Shaw [illegible] in 1898; the drama [illegible] captured the attention of the next two generations in the form of two memorable films, one starring Claudette Colbert and the other Elizabeth Taylor.

The literature dealing with Augustus and his accomplishments is vast. See, for example, the bibliography in [illegible] 1982.

[3] For the important role played by Actium in the propaganda of Augustus, see [illegible] 1978, pp. [illegible]. The pivotal role of Actium in the imagery of the Augustan Age is described by [illegible] 1984 and 1985 [illegible] 1988, pp. [illegible].

[4] For the most part, the evidence connected with the battle provides no connected narrative, and the facts preserved by this evidence are open to interpretation. [illegible]

resort to non-literary evidence to supplement and modify the surviving written accounts.

It is in this particular context that we offer a "new" piece of evidence concerning the Battle of Actium. Near the site of the final battle, at the exact place where he had placed his command post, Octavian constructed a war memorial to commemorate his victory. Vestiges of the monument survive to this day near Smyrtoula, a small suburb of modern Preveza. Though few scholars know of the site's existence, and even fewer of its full significance, here, preserved in stone, lie amazing new clues from a battle that redirected the course of Western history. In order to appreciate fully the monument's intended purpose, and to understand the impact of the new evidence it preserves, we should begin our analysis with the surviving historical tradition (whether it is faulty or not) concerning the battle and its aftermath.[3]

By the end of summer 32 B.C., Antony had moved his large army and navy into Greece, establishing bases along the western coast of the mainland and Peloponnesus.[4] He decided to forego an invasion of Italy, and thereby forced Octavian to fight for control of the Roman world in Greece. In retrospect, we might agree with Plutarch (*Ant.* 58.2) that this defensive posture cost him dearly. During the late winter and spring that followed, M. Agrippa, Octavian's most successful general and naval commander, methodically expelled Antony's western Greek bases and began to harass his food convoys.[5] At roughly the same time, Octavian

[illegible]

[3] For the following synopsis of events leading up to and including the Battle of Actium, references to the major ancient sources are provided. For further details the reader is urged to consult the studies cited in n. 2 supra.

[4] Plut. *Ant.* [illegible]

[5] Dio [illegible]

crossed his army to Epirus and seized Antony's base at Corcyra. He next moved southward to the northern shores of the Ambracian Gulf and, in response, Antony moved the bulk of his forces to Actium. By early summer of 31 B.C. two hostile forces occupied both sides of the Actian straits.

As the summer wore on, we are told that Antony was driven to desperation by a number of defeats, by Agrippa's continued success in interceptions, by desertions, and by the unhealthy conditions in his camps within the entrance to the Ambracian Gulf. In addition to these significant factors, Octavian ridiculed Antony's alliance with Cleopatra and uttered threats that Antony was no longer truly Roman—propaganda which seems to have had an effect on some of Antony's officers. In a desperate move on September 2 we are told that Antony manned his largest ships, put aboard his money and silver, and burned every ship he was unable through desertion or disease to fill with crews.[1] By midmorning, each fleet lay off the entrance to the gulf waiting for the other side to make the first move. Somewhere soon after midday the fleets finally engaged.[2] Arrows, slung bullets, and catapult shots filled the air as ships from each side prepared to ram, board, or grapple their opponents' vessels.[3]

According to most of the detailed accounts, Antony's warships were the larger, but their ramsmen were tired, and, as a result, Octavian's smaller, more maneuverable vessels won the day. We are told they coordinated their attacks against the larger ships by darting in to deliver their blows and then retreating to a safe distance to allow others to carry out their own strikes. The largest vessels, whose timbers were too heavy to be damaged by ramming, were set upon by two or three smaller ships which landed their marines on the enemy's decks.[4] At some critical moment, we are told, Cleopatra took flight, broke through the front line from the rear with her squadron of 60 ships, hoisted sail, and fled southward. When Antony saw the queen's flight, he broke off his own attacks, followed in her wake, and left behind the rest of his undefeated navy and entire army to fend for themselves.[5]

Unaware of Antony's departure, his navy fought on and only began to surrender after seeing dramatic news of the struggle in which most of their ships were destroyed.[6] According to one colorful account, the sea, choked with wreckage from the Actian vessels, was flecked with purple

[1] Dio 50.32.1–2; Plutarch, *Antony* 68.[2]

[2] Dio 50.32.2–4; Plutarch, *Antony* 68.2.

[3] Dio 50.33.1–3; Vell. 2.84.2; Florus 2.21.[4] Plutarch, *Antony* 68.3.

[4] Dio 50.33.4–5; Vell. 2.84.1–2.

[5] Plutarch, *Antony* 68.3–4; Dio 50.33.5–6; Vell. 2.84.1; Orosius 6.19.[5]

[6] Plutarch, *Antony* 68.4; Dio 50.34.1–2.

[7] For a discussion of this tradition, including the appropriate references to the ancient sources, see Chapter VI.

[8] Plutarch, *Antony* 73; Dio 50.35.3; Vell. 2.85.3.

[9] On this particular matter see Chapter VI.

and gold ornaments.[illegible] Dio says (50.34–35) that fire was brought from the Roman camp to set ablaze the remainder of the enemy fleet as a grand finale. Such versions obscure the fact that a final victory was not achieved until a week later, when Antony's army of 19 legions surrendered after negotiating generous terms.[illegible] Only after these matters were settled was Octavian's victory complete. Although we might reasonably doubt the veracity of the battle's more colorful accounts, subsequent events revealed the full magnitude of the victory won at Actium. In less than a year, Antony and Cleopatra were dead and Octavian was left alone to heal the wounds of war and reform the shattered Republic into the Roman Principate.

Immediately following the battle, however, all this was far from clear. During the ensuing winter, for example, the veterans who had been discharged following the Actian War's conclusion rioted and demanded payment of their promised bonuses and grants of land.[illegible] Although this short-term crisis was quickly defused by limited grants of land and further promises, the recent riots represented a far greater problem than could be solved by veteran land grants. Years of war and piracy had eroded commercial confidence and paralysed trade and commerce. A full recovery could only be achieved through the reestablishment of secure trading routes and a general revitalization of Greece and the East.

As part of a general solution to this widespread economic crisis, a new city was planned for the site of the army's former camp in southern Epirus. It was intended to serve as the major city on the west coast of Greece. Its name, Nikopolis, or "Victory City," reveals another reason for its founding. In a Greek tradition stretching back to Alexander, great generals had established "Victory Cities" near the sites of major battles.[illegible] Although called a "colony" by Pliny and Tacitus, Octavian's Nikopolis seems to have been a purely Greek foundation which held the rights of a "free city" like Athens and Sparta.[illegible] The surrounding communities

[illegible]

[illegible]

[illegible]

[illegible] Nikopolis' foundation [illegible]

[illegible]

[illegible]

were encouraged to migrate there by an officially sponsored synoecism (another old Greek tradition), and this in turn provided the population necessary for the city's development. Though the full details of this growing process are not recorded, the plan was a success; the population grew and the city prospered.

In addition to being the region's major administrative center, Nikopolis also served as a living monument to Octavian's naval victory, a role clearly stressed by at least two of the city's first building projects. According to Strabo, who wrote his account before A.D. 21 (and probably before 7 B.C.), a *temenos* sacred to Apollo occupied a suburb of the city. Containing a sacred grove, stadium and gymnasium, this *temenos* was clearly built for the newly revived *Aktia* or Actian Games. Originally, this festival had been hosted by the people of Anaktorion across the gulf at the sanctuary of Apollo Aktios. It was now reestablished as a quadrennial celebration, moved to Nikopolis and placed on a par with the four traditional Panhellenic festivals. The games, most likely held on the anniversary of the battle, served to commemorate the birth of the emerging Augustan Age.

To memorialize the naval victory and emphasize the peace that resulted from it, Octavian planned and executed two war memorials in the city's environs. One, a sort of naval museum, was built across the straits of Cape Actium near the ancient grove and newly refurbished

[illegible] to explain the apparent confusion of Dio and Tacitus [illegible] of the city [illegible]

[illegible] ancestral homes.

Cf. Strabo 7.7.6 [illegible]

On the history of Nikopolis [illegible] In 1984 the first international symposium on Nikopolis was held [illegible] conference [illegible] aspects of the city's archaeology and historical development [illegible]

Strabo lived at least until A.D. 21 [illegible] *Geography* by 7 B.C. [illegible]

For the [illegible] games [illegible] For the nature of the reestablished games [illegible] The games are referred to as *ludi quinquennales* by Suetonius [illegible] they were held every four years.

temple of Apollo Aktios.[1] The other he placed on the hillside where his command post and tent had stood before the battle, overlooking the straits, the growing new city, and the grove where the Aktia were now celebrated. As the official war memorial of Nikopolis, a city which was itself a "living" victory monument, this building may have been the most important structure built by Octavian outside of Italy. It was certainly the most important monument associated with the new city.

Amazingly, Octavian's Campsite Memorial still exists. And equally amazing is the fact that few people know of its existence (though it was discovered 75 years ago) and almost no one realizes its rich historical significance.[2] But it is only here, high on a hillside at the site of Octavian's tent, that one can physically see the immense sizes of Antony's ships and begin to appreciate Octavian's early grasp of Actium as political propaganda. Here is also to be found Octavian's first official statement on the Actian War in an important inscription that has yet to be properly published. Long before the Augustan historians and poets completed their versions of the battle in the straits, this monument was built to deliver the message of the New Order. The message is propaganda, to be sure, but it comes directly from the mind of Octavian shortly after he found himself alone in power. As such, it stands among the earliest sources we possess for the Actian War, and represents a find as important as a fragment from Augustus' lost memoirs.

We begin, therefore, with Octavian's Campsite Memorial at Nikopolis. After determining as much of its original appearance as its surviving remains allow, we consider the evidence it preserves for the immense ships that fought in the Battle of Actium. We then examine the design of the monument in an attempt to discover the messages, both blatant and subtle, that it was intended to convey. And last, but not least, we use the monument and the evidence it preserves to reassess some important historical problems associated with the battle and the foundation of Nikopolis. Above all, however, our primary goal is to make known an important Augustan monument and begin the discussion of the com-

[1] [illegible]

[2] In the proceedings of a recent international symposium concerning ancient Nikopolis, the monument is mentioned only a few times, and only once in any detail; cf. [illegible] 1987 and [illegible] 1987, pp. 171–73.

plex clues it presents concerning the monstrous ships in Antony's and Cleopatra's fleet. We do not intend to resolve all the problems raised by the Campsite Memorial, but if we, at long last, stir up interest in a monument too long neglected, then our study will have fulfilled its intended purpose.

II: Octavian's Campsite Memorial for the Actian War

1 *The Ancient Testimonia*

During the generations of peace that followed the victory at Actium, many visitors paid homage to the region officially proclaimed the birthplace of the New Order. Midway along the coastal route from Greece to Italy, Nikopolis provided a welcome break for travelers on their way to the West. The entrance to the gulf offered excellent anchorages and there was plenty for tourists to see on both sides of the straits. To the south lay the old temple of Apollo Aktios, newly refurbished after the capture of Egypt. A whole set of warships had been dedicated there by Octavian (but they and their boathouses had burned to the ground within a generation of their dedication). Other sights could be found in the new city to the north of the straits. Of all the new buildings, the theater, gymnasium and stadium, the memorial most closely associated with the founder and architect of the Principate could be found where his tent had stood during those fateful summer days of 31 B.C.

Large and impressive, it sat on a hill to the north of the city and was clearly intended to serve as the premiere memorial of the founder's "Victory City." It should surprise no one that more ancient references to it have survived than to any other building in Nikopolis. Unfortunately, these *testimonia* confuse as much as they enlighten. Nevertheless, we must start with these observations if we ever hope to reveal the true nature or to reconstruct the intended aspect of Octavian's monument.

1 Dio Cassius 51.1.3: τό τε χωρίον, ἐν ᾧ ἐσκήνησε, λίθοις τε τετραπέδοις ἐκρηπίδωσε καὶ τοῖς ἁλοῦσιν ἐμβόλοις ἐκόσμησεν, ἕδος ἐν αὐτῷ τοῦ Ἀπόλλωνος ὑπαίθριον ἱδρυσάμενος.

On the spot where he had pitched his tent, he laid a foundation of square stones, adorned it with the captured ship rams, and established on it a kind of open-air place, sacred to Apollo.[*]

2 Suet. *Aug.* 18.2: *Quoque Actiacae victoriae memoria celebratior et in posterum esset, urbem Nicopolim apud Actium condidit ludosque illic quinquennales constituit et ampliato vetere Apollinis templo locum castrorum, quibus fuerat usus, exornatum navalibus spoliis Neptuno ac Marti consecravit.*

To extend the fame of his victory at Actium and perpetuate its memory, he founded a city called Nikopolis near Actium, and provided for the

[*] The text comes from the Loeb edition of Cary [1917]; cf. also n. 7, infra.

The text comes from the Loeb edition of Rolfe [1951].

celebration of games there every four years, enlarged the ancient temple of Apollo, and consecrated the site of the camp that he had used to Neptune and Mars, after adorning it with naval spoils.

3 Suet. *Aug.* 96.2: Apud Actium descendenti in aciem asellus cum asinario occurrit: homini Eutychus, bestiae Nicon erat nomen; utriusque simulacrum aeneum victor posuit in templo, in quod castrorum suorum locum vertit.[3]

At Actium as Octavian was going down to begin the battle, he met an ass with his driver, the man having the name Eutychus [Lucky] and the beast that of Nikon [Victor]; and after the victory he set up bronze images of the two in the sacred enclosure into which he converted the site of his camp.

4 Plut. *Ant.* 65.3: [illegible]

[illegible]

Caesar, it is said, who had left his tent while it was yet dark and was going around to visit his ships, was met by a man driving an ass. Caesar asked the man his name, and he, recognizing Caesar, replied: "My name is Lucky, and my ass's name is Victor." Therefore, when Caesar afterwards decorated the place with the rams from the ships, he set up bronze figures of an ass and a man.

5 Philippus in *Anth. Pal.* 6.236:

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

Bronze prow-beaks, ship-voyaging, loving armor, we lie here as witnesses to the Actian War. Behold, the bees' wax-fed gifts are hived in us, weighted all round by a humming swarm. So good is the grace of Caesar's law and order; he has taught the enemy's weapons to bear the fruits of peace instead.

6 Strabo 7.7.6: [illegible]

Nicopolis is populous, and its numbers are increasing daily, since it has not only a considerable territory and the adornment taken from the spoils of the battle, but it also has, in its suburbs, the thoroughly equipped sacred

[3] The text comes from the Loeb edition of [illegible] 1951.
[4] The text comes from the Loeb edition of [illegible] 1920. Zonaras 10.30 (p. 152b D) repeats this same story, and adds that the two statues were later carried off to Byzantium and set up in the Hippodrome.
[5] The text comes from [illegible] 1968, [illegible], pp. 298–99; see also the commentary in vol. [illegible], p. [illegible].
[6] The text comes from the Loeb edition of [illegible] 1924.

precinct—one part of it being in a sacred grove that contains a gymnasium and a stadium for the celebration of the quadrennial games, the other part being above the grove on the hill that is sacred to Apollo.

According to Dio, Octavian set up a foundation or podium decorated with warship rams, and on top established some sort of open-air shrine that was sacred to Apollo. His description of this "open-air place" is not very exact. Suetonius, on the other hand, mentions no shrine and implies that the memorial consisted largely of a display of naval spoils. According to him, the site of the camp was turned into a "templum" or sacred enclosure and everything, including the spoils and successive statues, was dedicated to Neptune and Mars, but makes no reference at all to Apollo.[1] Strabo, on the other hand, seems to imply that the Campsite Memorial was part of a larger complex sacred to Apollo. He says that one part of the thoroughly equipped sacred precinct was located on a hill itself sacred to Apollo, above the grove, while the other part of the precinct (containing a grove, stadium, and gymnasium) was clearly sacred to Apollo. It is by no means clear that the part on the hill was sacred to Apollo as well.[2] Although the Greek text states simply that the hill,

and not necessarily the memorial, was sacred to Apollo, one is left to ponder the suitability of a monument for Neptune and Mars on a hill sacred to Apollo.

Our sources are not fully consistent with one another, and thus present us with the following problem. Although we know that a memorial was built on the site of Octavian's camp to commemorate his victory at Actium, we are not sure to whom it was dedicated nor do we know the precise nature of its original construction. Clearly, a definite solution requires more evidence than that of the ancient texts. For this, we must carefully examine the monument itself, discovered almost 75 years ago but never extensively published. As a result, the existence of this important monument remains unknown to most scholars of the Augustan period while those who do know of it are faced with conflicting and incorrect descriptions of the remains. In order to appreciate fully what Octavian built at his campsite, why it has been so poorly understood, and the wealth of information it preserves, we must begin with the rediscovery of the monument in the nineteenth century.

2. *The Rediscovery of the Monument (Fig. 2)*

In June 1805 Col. W.M. Leake paid a visit to southern Epirus and correctly identified the ruins near Preveza with ancient Nikopolis. He also located the region of the sacred grove for the Actian games which was clearly indicated by the ruins of a stadium and a large theater at the foot of a hill called Michalitsi (Fig. 2). Above the Campsite Memorial, Leake thought the best place for Octavian's command post (and thus

Fig. 2

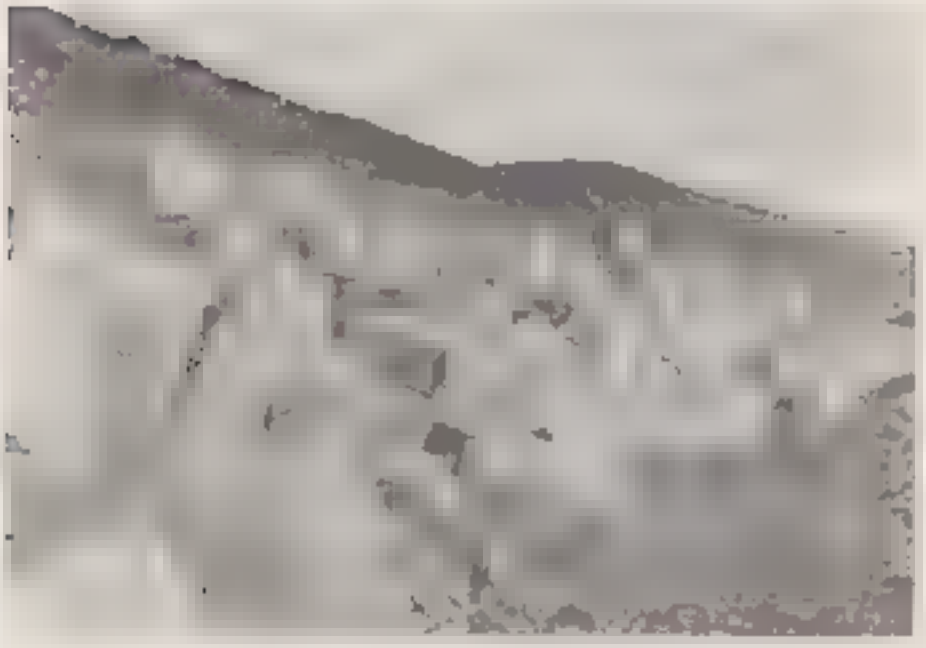


Fig. 3

the monument] was on top of Michalitsi behind the grove.[9] The true site of this post went undetected until 1913, when, after an exhaustive search on the southern flank of the hill, Alexander Philadelpheus located and partially excavated what he identified as a large temple of the Corinthian order (Fig. 3). According to the first report, the temple was preserved only in its foundations which measured some 58 by 23 meters. Later, after further excavation of the site in 1921, Philadelpheus estimated its size as 62 by 45 meters.[10]

During the course of the 1913 excavation, Philadelpheus unearthed a Corinthian capital (Fig. 4), column drums of local limestone, fragments

Fig. 4

[9] Leake 1835, pp. [illegible]. [illegible] 1967, Vol. II, p. [illegible], apparently following the idea first expressed by [illegible] 1826, p. [illegible], [illegible] that a temple of Apollo [illegible] was placed at Octavian's campsite. [illegible] Leake, on the top of Michalitsi. Although Leake clearly indicates that this is where one ought to expect Octavian's camp, [illegible] to have found such a site. In fact, no such site, neither temple nor campsite, has ever been found on the summit of the hill.

[10] [illegible] 1913, pp. [illegible] that the precise dimensions of the temple were difficult to determine because [illegible] foundation blocks. Philadelpheus returned to the site in 1921 to continue his excavation of the "temple." He reports [illegible] architectural fragments were found along with [illegible] large pieces of the inscription (Philadelpheus 1921, p. 42). Many years later [illegible] that the dimensions of the temple were at least 62 by 45 meters [illegible]. These figures correspond well to the length of the podium's [illegible] retaining wall and the distance from this wall to the stoa's north foundation (see infra, section [illegible]). [illegible] Philadelpheus found the northern stylobate of the stoa, [illegible] by Ph. Petsas in 1974?

of a cornice, and rooftiles of both Laconian and Corinthian type. In addition, nine fragments from the monument's large dedicatory inscription were found, which alluded, he felt, to the donor, the victory, and the god to whom the temple was dedicated. The text, he believed, was originally carved on a frieze course supported by the temple's columns. Satisfied that he had found Octavian's Campsite Memorial, but disappointed by the lack of spectacular finds, Philadelpheus turned his attention elsewhere. Hereafter, no one doubted that this important monument had been found, but the correct interpretation of its original appearance awaited further examination of the remains.

Not everyone who discussed the monument after its discovery agreed with Philadelpheus that a temple had been built at the site. Such a structure simply failed to conform with the ancient descriptions of Octavian's campsite. K. A. Rhomaios, a former student of Philadelpheus who studied the dedicatory inscription in the early 1920s, preferred the testimony of Dio to Suetonius. To explain the disagreement concerning the divine recipient(s) of the dedication, Rhomaios proposed the following three-step solution: 1) Suetonius' source was a list of the spoils placed in the sanctuary of Apollo from the Battle of Actium; 2) Among the items on this list was the famous selection of rams, and these alone were dedicated to Neptune and Mars; 3) Suetonius mistakenly generalized the recipients of this dedication to the whole memorial. Rhomaios also proposed that the original form of the monument was a simple enclosure or temenos containing an raised podium (the ram display) and at least two statues. According to him, the architectural fragments found at the site came from some unrecorded temple built at a later date. The inscription he felt was placed along the face of the ram display.

In 1936, two articles appeared which discussed the monument and its inscription. One, by E. Schober, was a general treatment of Nikopolis for Pauly-Wissowa's *Real-Encyclopädie*; the other, by J. Gagé, was a considerable piece of original scholarship which is discussed more fully below. By this time, 25 fragments of the large inscription had turned up and one block clearly bore the last four letters of the name Neptune.

[illegible] 1925, p. 57. [illegible]

[illegible]

[illegible] 1925, pp. [illegible]

The block reads [illegible] reported that only 21 blocks were known [illegible] 1936, pp. [illegible] preserved 25.

Since the sea god was obviously one of the deities honored here, Schober simply concluded that the memorial was a large temple of Neptune inside which were placed, among other items, the two statues of Eutyches and Nikon.

Gagé's views on the monument were contained in a detailed study of the ex-votos and trophies resulting from the Actian War. Although he discussed the Campsite Memorial in depth, Gagé seems never to have visited the site. He drew his information entirely from the accounts (both published and unpublished) of Philadelpheus and Rhomaios and from communications, through intermediaries, with Philadelpheus and J. Mihalos, a subsequent ephor of Epirus who had worked briefly at the site in 1926. Gagé's remarks, even without his personal examination of the site, still constitute the most complete analysis of the monument in print.

Arguing mainly from the ancient texts, Gagé concluded that a *temenos*, not a temple, existed here and that it was sacred to Apollo. He argued that Suetonius called the site a *templum* or sacred enclosure, that Dio described a podium built of squared blocks surmounted by a large statue of Apollo, and that Strabo equated the place with the *temenos* at the base of the hill, also sacred to Apollo. Gagé believed the texts were not contradictory, if viewed in the correct way, because the monument was dedicated in a sense to all three deities. He even thought it possible that all three were mentioned in the dedicatory inscription.

Gagé also concluded that the remains found by Philadelpheus were most appropriate to a portico or stoa and not a temple: "We ought, following these facts, to restore a monument completely at ground level, without elevation (unless there was some sort of podium), a sort of peribolos decorated with rams, probably on its sides. And in the middle, in the place normally occupied by the naos, were statues." According to Gagé, Apollo's would have been the most considerable, but there would have been others, such as those of Eutyches and Nikon. Furthermore, a large cult statue of Apollo (which he thought was attested by the account of Dio [illegible]) would have looked over and protected the transplanted games of Actian Apollo.

Finally, the monumental size and considerable length of the inscription led Gagé to follow Rhomaios' suggestion and envision the text on the primary facade of the monument, not around the sides of some

[illegible] Schober 1936, col. 517.

Gagé 1936, pp. [illegible], especially p. [illegible].

Gagé 1936, p. [illegible], n. [illegible]. After Rhomaios' work on the inscription was published in 1922 and 1925, Mihalos [illegible] of the site in 1926 and found a few more of the large inscribed blocks [illegible]. Years later, when Gagé published his study of Roman Apollo [illegible] he still had not visited the site when he tried to describe [illegible] the exact placement of the monument's remains (cf. supra n. 12).

Cf. supra nn. 7 and 8.

Gagé 1936, pp. [illegible].

Gagé 1936, pp. [illegible].

temple. Thus, for Gagé, the monument had a form somewhere between a monumental trophy of massive cylindrical shape and a temenos or religious enclosure inhabited by a deximeny. In this hybrid form, therefore, Octavian would have combined the traditional Roman trophy with the great commemorative monuments of the Greek world.

In 1955, Gagé restated his interpretation of the monument when he published his study of Roman Apollo. Three years later, C. Ch. Picard published a study of Roman trophy architecture and included a description of the Campsite Memorial based in part on Gagé's observations. He argued that this type of monument was depicted on a series of denarii minted by C. Antistius Vetus in 16 B.C. (Fig. 5). It was not exactly the same, however, because its statue group was more complex than the single deity shown on the coin. An example of such a group could be found, Picard thought, in a composite trophy-group of Augustan date at St. Bertrand (in France). From this example, Picard concluded that the statues of Neptune, Mars and Apollo were arrayed in a manner similar to the St. Bertrand group, but were set up on a rectangular base whose sides were decorated with warship rams.

Aside from Picard, who demonstrates the danger of concluding too much from a site that has been improperly published, scholars have generally ignored the arguments of Rhomaios and Gagé concerning the monument. This includes the scholarly community outside Greece, the

Fig. 5

Gagé 1936, pp. 57–58. He later [illegible].

Gagé 1955, pp. 508–10. At this time he had changed his view slightly concerning the nature of the monument's design; cf. Gagé 1955, p. 511: [illegible] qui, quel que fût son style architectural, était de vieille tradition romaine par l'exactitude de l'emplacement consacré par le choix des dieux.

Picard 1957, pp. 260–62.

Picard 1957, p. 261.

Picard 1957, p. 262; for the monument at St. Bertrand, see his pp. 270–73; a drawing of the group is found between pp. 272 and 273.

subsequent editors of the monument's inscription, and the educated members of the local community.[8] A small sign was placed years ago near the junction of the town's main street with the Preveza-Arta highway reading ΠΡΟΣ ΤΟΝ ΝΑΟΝ ΤΟΥ ΑΠΟΛΛΩΝΟΣ ("To the Temple of Apollo"). It was replaced a few years ago with a large blue and yellow road sign which points an arrow to the town's main street and reads "Temple of Apollo." Old ideas die hard.

Eugene Vanderpool, who visited the site every few years while professor of archaeology at the American School of Classical Studies, seems to have been the first to draw attention to the cuttings in the face of the preserved podium. Though unable to explain exactly how they worked, he recognized that a series of complex holes, shaped like enormous bass viols, somehow served to attach the rams originally displayed at the site.[9] And this is where the matter rested until 1974 when a complete reinvestigation of the monument was begun by Ph. Petsas and the Athens Archaeological Society.

Petsas was interested in this monument for a number of reasons. First, there was its unique importance as the official memorial of the Battle of Actium, one of the major events of world history according to ancient and modern opinion.[10] Second, the monument's known date (29 B.C.) was expected to provide a useful fixed point in the local chronology of Roman Nikopolis. This, in turn, was intended to aid research on other Roman monuments at Nikopolis, particularly those from the period of the city's founding. And finally, though the Campsite Memorial was partially excavated 60 years prior to 1974, it really remained unpublished. Except for Philadelpheus and Gagé, scholars had focused their attention exclusively on the dedicatory inscription. As a result, a full description of the site, illustrated with plans and photographs, had never been published. In addition, the podium's surface had never been systematically excavated.

Unfortunately, the hopes of a comprehensive study were cut short by the military events affecting Cyprus in 1974. Work at the site was terminated by a general mobilization of the Greek armed forces on July 20, and the project was never renewed. To make matters worse, there had

[8] Two recent treatments of Nikopolis [illegible] 1987, Vol. II, pp. [illegible] and [illegible] comprehensive study [illegible] 25 fragments of the inscription [illegible] the 25 fragments [illegible] pp. 126–82 [illegible] Memorial.

[9] [illegible] Vanderpool expressed them [illegible] spoke with him about the [illegible]

[10] See, for example, [illegible] 1978, pp. 216–18.

been insufficient time for the completion of a site plan. It was impossible, therefore, to publish anything more than a general description of the season's incomplete results and a large number of photographic views.[4] Consequently this important monument still remains largely unknown to most scholars, and a unique example of a Roman victory [illegible] display showing decorated in the middle of a clear path.

On the positive side, the accomplishments of the 1974 season were significant. For the first time a dirt road was cut through to the site intended to aid in the removal of earth removed and to facilitate the movement of fallen blocks. The road still enables cars and trucks to reach the monument. In addition to the exploratory trenches were sunk near the podium's northeast and the stylobate of the stoa was located running east-west for a total length of [illegible] m. Only an edge of the stoa's stylobate was uncovered before the work was terminated, but it is clear that this structure must be identified somehow with the [illegible] [illegible] uncovered in the 31 [illegible].

In addition to discoveries made on the podium in 1974, Petsas also cleared the area surrounding the podium of all vegetation. As a result, he found a number of the inscription blocks and two column drums, but most important revealed clearly the cuttings at the rear of the podium's retaining wall. Although there is no doubt that bronze washer rams originally filled these semi-shaped sockets, just how this worked was difficult to determine. And to make matters more complicated the sockets were of different shapes and sizes, clearly reflecting in some way the different dimensions of the ships that occupied the host rams. Hoping to examine the matter more fully at a later date, Petsas published photographs of these cuttings in his 1974 report for *Praktika* and *Ergon*. But the key to the cuttings' interpretation and hypothesis, the solution to the true appearance of the Campsite Memorial had to move years to lie on the seafloor off the coast of Athlit, Israel.

In the meantime, the monument was briefly discussed in one book and two articles. In 1975 M. Kajanto-Thylander published a study of the mint at Nikopolis. She argued that a temple of the Corinthian order appearing as a coin type during the reign of Septimius Severus ought to be identified with the Campsite Memorial.[5] Two years later, J.M. Carter published some confusing remarks on the nature of the monument and the placement of its inscription when he erroneously reported the existence of a new fragment in 1877.[6] And more recently, H. Tucker has tried to show that the monument depicted on the reverse of a series of denarii issued by C. Antistius Vetus in 16 B.C.[7] Tucker revives an old view that Apollo stands near an altar on top of a high

[4] For the reports of the work in 1974 see Petsas (1974a and 1974b-1975), pp. [illegible].

[5] Kajanto (1975), pp. [illegible].

[6] Carter (1977), p. 225; see also Section 3 b. Carter was relying on observations he had made at the site in 1967.

[7] Tucker (1982), pp. [illegible].

Fig. 6

Fig. 7

podium decorated with two anchors and three rams viewed frontally.[8] He advances this interpretation one step further by arguing that the scene is an abbreviated view of the Campsite Memorial. Even though the frontal views of the rams on the podium look quite odd, his argument seems persuasive, but is it correct? Unknown to Tucker, and to everyone else who had worked on the monument, the key to solving the problems of the Campsite Memorial had already been pulled from the sea off Israel.

In November 1980, Y. Ramon, a graduate student at the University of Haifa, discovered a well-preserved Hellenistic warship ram (fig. 25). He found it on the sea bottom about 100 meters from the shore in Athlit Bay, some 15 km. south of Haifa.[9] The ram was cast in 465 kg. of high grade bronze, has an overall length of 2.26 m., a maximum width of 0.76 m., and a maximum height of 0.95 m.[10] When sectional drawings were published by J.R. Steffy in 1983, W.M. Murray recognized a similarity in shape between the ram's cross-section where it attached to the bow of its ship and the nose-like shapes of the Nikopolis sockets. After examining both the ram in Haifa and the monument at Nikopolis, he realized that 1) the monument could be used to determine the ship class of the Athlit ram, and 2) in return, the ram could help to explain the exact function of the sockets. Furthermore, an understanding of these sockets might allow for the reconstruction of the warship bows whose rams once decorated the monument.

When approached by Murray with this new information, Ph. Petsas agreed to help with a reexamination of the monument's cuttings. A collaborative project was proposed to both the Athens Archaeological Society and the Greek Archaeological Service; permission was granted, and the necessary fieldwork carried out in May 1986. Funding for the project was generously provided by the American Philosophical Society, the University of South Florida, and the city of Preveza.[11] To all those whose help enabled the successful completion of this project, the authors extend their sincere appreciation and thanks.[12]

[8] Cf. Tucker 1987, pp. 261–67. [illegible] alternate interpretation of the scene [illegible] set forth by H.A. Cahn [illegible] decorated with [illegible]

[9] For the initial discovery and first reports [illegible] 1981, p. 292 [illegible] 1982 [illegible] For a map showing the findspot, see [illegible] For the date and provenience of the ram, see [illegible]

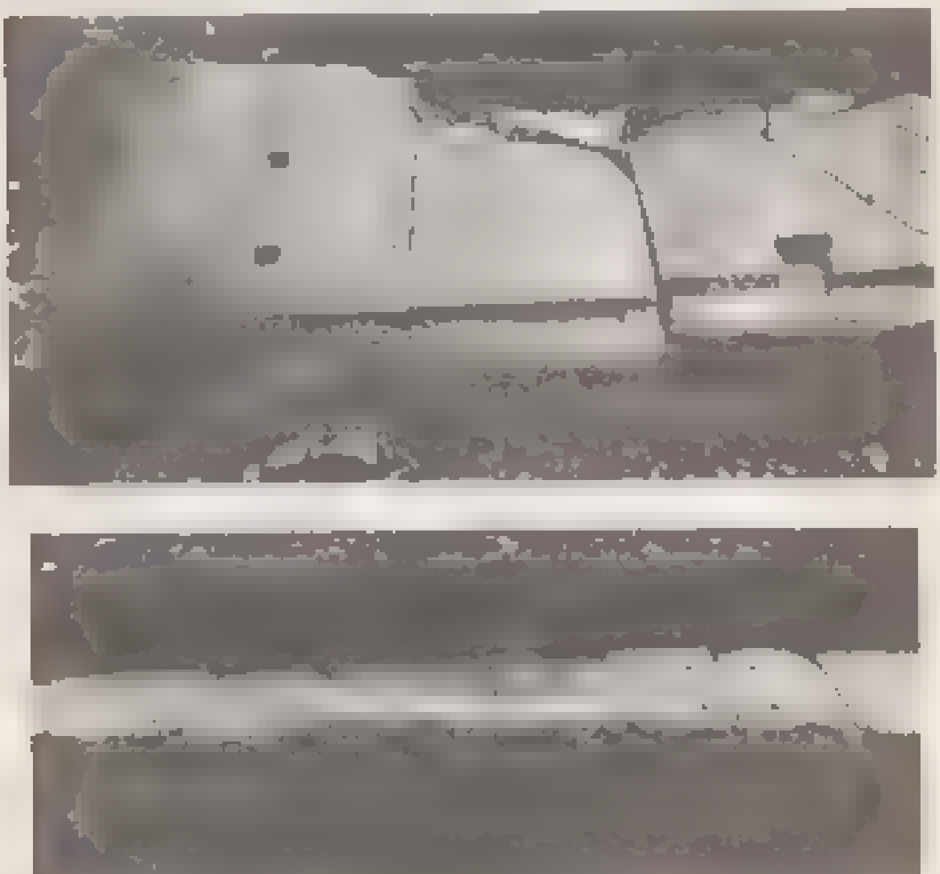
[10] Personal communication from J.R. Steffy, [illegible] 1986.

[11] The authors wish to thank the mayor of Preveza, Mr. [illegible], for sponsoring our request for assistance before the city council (which agreed to pay the expenses of our lodging), and also for assigning [illegible] workers to help with cleaning the site.

[12] The fieldwork in May 1986 was carried out with the [illegible] Murray [illegible] and [illegible] visited the site for a few days to help with the compass survey of the monument [illegible] the photographs [illegible] of this manuscript [illegible] July 1987, when we were aided by [illegible]

[illegible] The Survey of [illegible]

During the [illegible] years prior to [illegible], a half-dozen investigators of Octavian's Campsite Memorial had compiled the following list of sometimes conflicting observations: 1) the dimensions of the temple preserved only in its foundations; 2) a few architectural elements such as column drums, [illegible] capital, moldings, etc.; 3) [illegible] fragments from a large inscription [illegible] blocks; 4) the [illegible] of a slot with cuttings on its surface [illegible] of different sizes [illegible]. Even when a list of ancient references to the monument was added, a clear picture of what actually existed here failed to emerge. The primary goal, therefore, was to record accurately the surviving elements of the monument currently visible above ground. In particular [illegible] proper round



b

Fig. [illegible]

[illegible]

of the cuttings, or "sockets," on the south retaining wall. To accomplish this goal we divided our investigation into three main tasks. Since we first needed to make an accurate plan of the site, we cleared away the considerable covering of thorns and weeds and mapped the exposed remains. Next, we recorded the dimensions and spacing of the sockets preserved in the downhill face of the podium's southern retaining wall. And finally, to obtain an exact record of the cuttings' different shapes, exterior dimensions, and the relative positions of the constituent blocks, we made a photographic mosaic of the podium's south face.

When we first arrived at the site in early May, it was so overgrown with weeds, grasses, ferns and thorns that two days of work were required to expose the blocks of the southern retaining wall. A careful examination of the remains revealed the outline of the podium, a rectangular terrace supported by a stout retaining wall on three of its sides (figs. 9–13). On the terrace's south side, the wall runs east to west some 62 meters; the western and eastern returns are preserved for 21 and 23 meters respectively. These remains are clearly the "temple foundations" reported by Philadelpheus in 1913. Overall, the walls are fairly well preserved and reveal a clear understanding of the pressures they were designed to contain. Notwithstanding their sturdiness, both the western and eastern sides of the podium have suffered considerable damage at the hands of stone robbers. On the steeper western side of the terrace, the wall is preserved in only one place to the height of three to four courses; elsewhere only the foundation course remains (figs. 12, 14). Even this lowest course has been displaced in many sections of the surviving eastern wall (fig. 10). The fact that the podium has not collapsed is due in large part to the extensive use of concrete in the core and the continued integrity of the southern retaining wall (fig. 13).

On the positive side, the poor condition of the eastern and western walls reveals how the sides of the podium were originally constructed. Both retaining walls consist of heavy limestone blocks backed by a solid mass of concrete. Along the western side, where the remains are more complete, it can be seen that a few headers were placed at irregular intervals in an attempt to anchor the wall to its concrete core. On the downhill portion of both sides, the limestone facing blocks are stepped back into the hillside, resulting in a double row of blocks as a facing for the concrete core. This was done, presumably, where the architects thought greater pressures had to be contained. For further strength, the

[illegible]

[illegible]

[illegible] A comparison of figures 3 and 11 shows how many blocks have been removed since 1913.

Fig. 4.

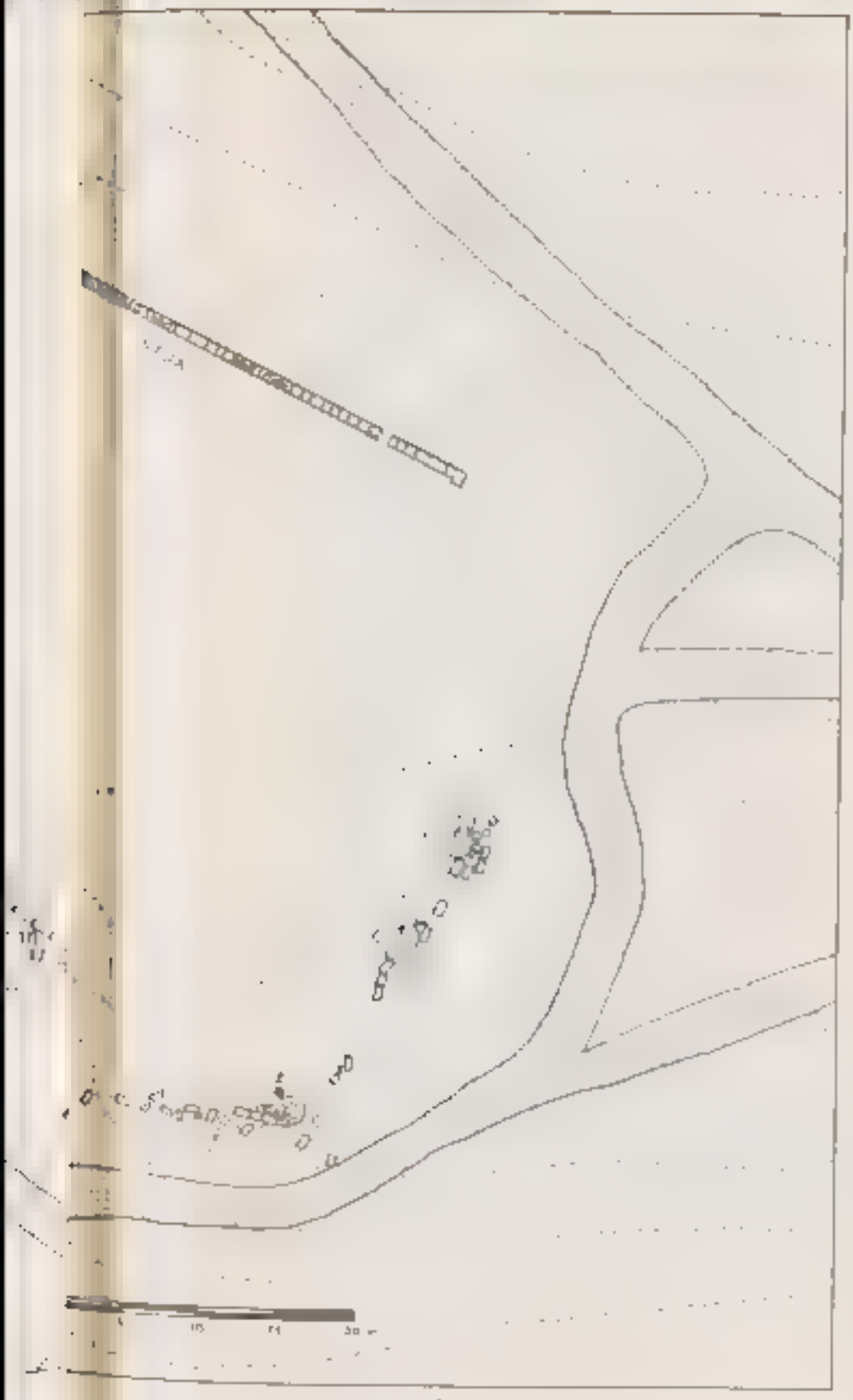


Fig. 4

Fig. [illegible]

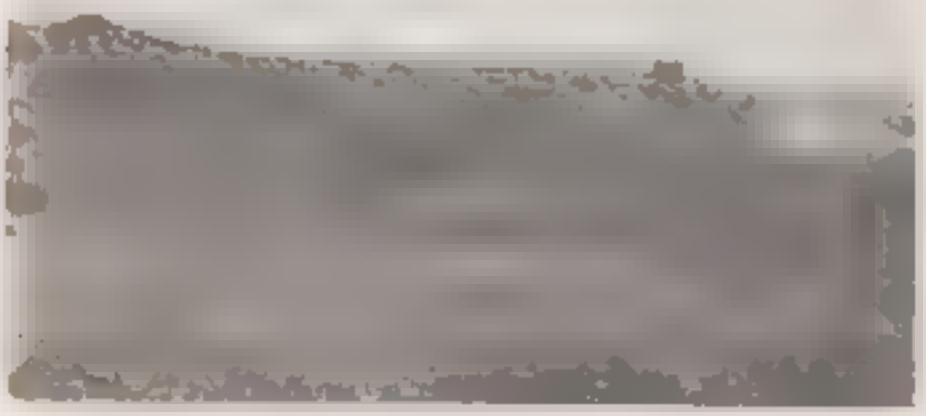


Fig. 11

Fig. 12

Fig. 13.

Fig. 14

exterior line of blocks in this double row was clamped together by iron "double T" clamps ( ) set in lead.

In addition to the double rows of blocks, the clamps, concrete core and headers, the blocks of the downhill portions were also bedded on a layer of concrete. Such a foundation can be seen at a number of places—beneath the robbed out blocks of the southwest and southeast corners, beneath the first block where the double row begins along the western wall (Fig. 14), and beneath several blocks still *in situ* near the east end of the southern wall (Fig. 15). From numerous gaps in the front (i.e., south) wall, it can also be seen that concrete was used here as well (Fig. 16). In fact, concrete was originally poured behind the entire length of the south wall as a means of binding the facing blocks together, thereby providing additional stability to the whole structure.

This exact type of construction is well attested in Rome as characteristic of the Augustan building program.[a] The usual concrete found in Rome during this period is "dusky red" in color and contains large rubble inclusions called *caementa*.[b] These were usually taken from stone that was easily available, often from the same stone that served as the facing for the core. In the case of the Campsite Memorial, the concrete is basically gray (although it has a reddish cast to it in some places) with large *caementa* of limestone irregularly laid in the mortar. The *caementa* are clearly from the same stone that served as the facing for the core. Parallels for this type of construction (a concrete core boxed in by squared stone walls) can be found in numerous buildings of this period in Rome, most notably in the podium for the Temple of Divus Iulius, the Mausoleum of Augustus and the *Basilica Aemilia*.[c] But in many of the Roman examples, only fragments of the squared stone facing remain.

Fortunately for us, the main southern wall of the podium at Nikopolis is also the best preserved. It currently lies exposed for about 45 meters of its original 62 meter length and attains a height of four to five courses.[d] Two gaps currently exist in the wall: 2.65 meters are missing at its western end and a 4.0 meter stretch between sockets 28 and 3[illegible] has been ripped out. In addition, a 16.5 meter section of the wall's eastern end remains to be excavated (cf. Figs. 17–19). Slumped, broken and bent, the southern wall reveals the strain of continuing the hillside for almost 21 centuries. Nevertheless, preserved along the entire length of its south face is the true measure of the skill exhibited by the monument's builders, for here remain the intricately carved sockets that once held the enemy's rams slightly recessed into the face of the retaining wall.[e]

[a] For a clear presentation of the evidence, see [illegible] 1947, pp. 1[illegible].

[b] [illegible] 1947, p. [illegible].

[c] [illegible] 1947, pp. [illegible].

[d] The wall reaches a height of [illegible] courses [illegible] that actually overlap one another. As can be seen [illegible] Figure 1[illegible] [illegible] behind the top of the fourth course along much of the [illegible].

[e] Surviving blocks [illegible] the [illegible] make it certain [illegible] rams were [illegible] toward the west or the east.

Fig. 15

Fig. 16

Fig. 17

Fig. 14

FIG. IV

a The Sockets and Their Importance

After all the weeds and thorns had been cleared from the front of the monument, the interiors of each socket were carefully cleaned to ground level. Thorn bushes have established thick roots behind and between many blocks in the wall, and it required dogged persistence to cut back the growth below the level of the cutting's surface. Throughout this process of cleaning the sockets, particular care was taken not to disturb the monument itself. In a number of places near the sockets' edges, the limestone blocks are badly weathered and cracked. In fact, we found four pieces that had previously broken off the face of the wall; each piece was set back into its original position, and it is hoped they will be reattached to the monument's face in the near future.

Once the task of cleaning was done, 23 separate sockets were clearly visible, arranged from west to east in generally decreasing sizes (figs. 17–22). Starting with the first cutting on the west, which was designated number 1 (hereafter socket numbers will be written [1], [2], [3], etc., to distinguish them from measurements or numbers), we recorded a series of width and height measurements as well as a number of profiles. A full description of these measurements is given in Table 1.

So that the reader may understand what was recorded, we must now explain the reason for the sockets' peculiar shapes, and this is best demonstrated by comparing Figure 23 with Figure 24. The first illustration represents a cross-sectional view of the Athlit ram 32.2 cm. forward of the post trough (or lip) along the A line in fig. 25. If the Athlit ram were mounted on the wall at Octavian's campsite, this section would correspond to the plane of the wall's surface. Since the immense weight of the weapon was supported by the ground, the designers of this wall needed only to ensure that the fit between the ram and the wall was tight. To accomplish this, they carefully cut back the timbers from each ram's interior to create a hollow. They then carved the socket for each ram leaving a central raised section (or "core") which corresponded in shape to the ram's hollowed interior. Then, as they eased the ram into its socket, the core of each cutting slid into the cavity created by the removal of the ram's timbers.

This "hand-in-glove" fit explains why no clamps held the rams in place on most of the cuttings, and why the core of each cutting corresponds so closely in shape to the wooden timbers found intact inside the Athlit ram (the chock, stem, ramming timber and wales). By measuring the dimensions of the sockets and their cores, priceless direct information from the bow timbers of Antony's fleet can be recovered.

There is more. Because the sockets were carved to receive the after ends of each ram, they preserve the after-end curvature and rear contours of the trough ear and bottom plate (cf. fig. 25). By carefully re-

The clamped areas occur at sockets [illegible]; for additional details, see infra.

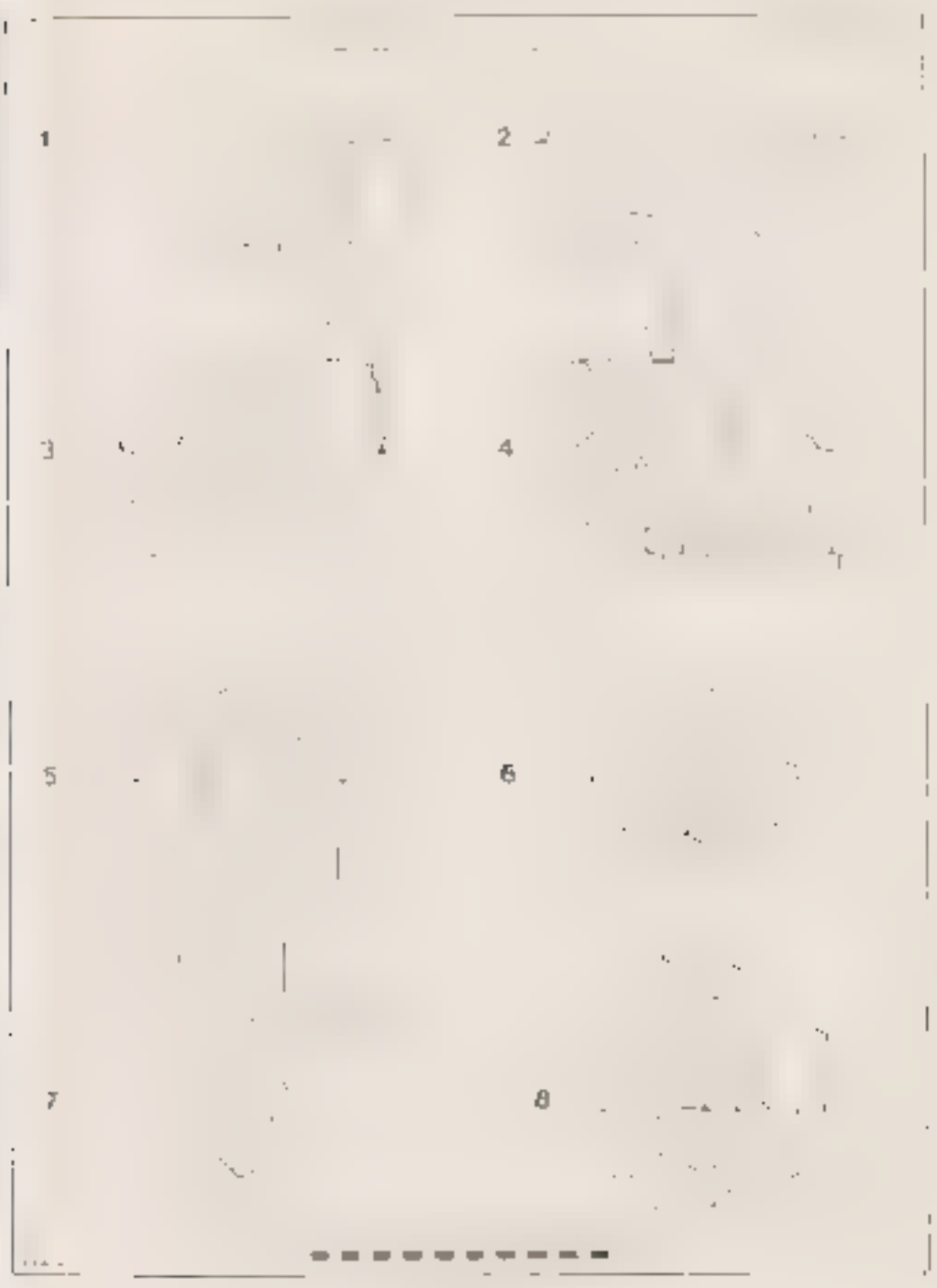


FIG. 20

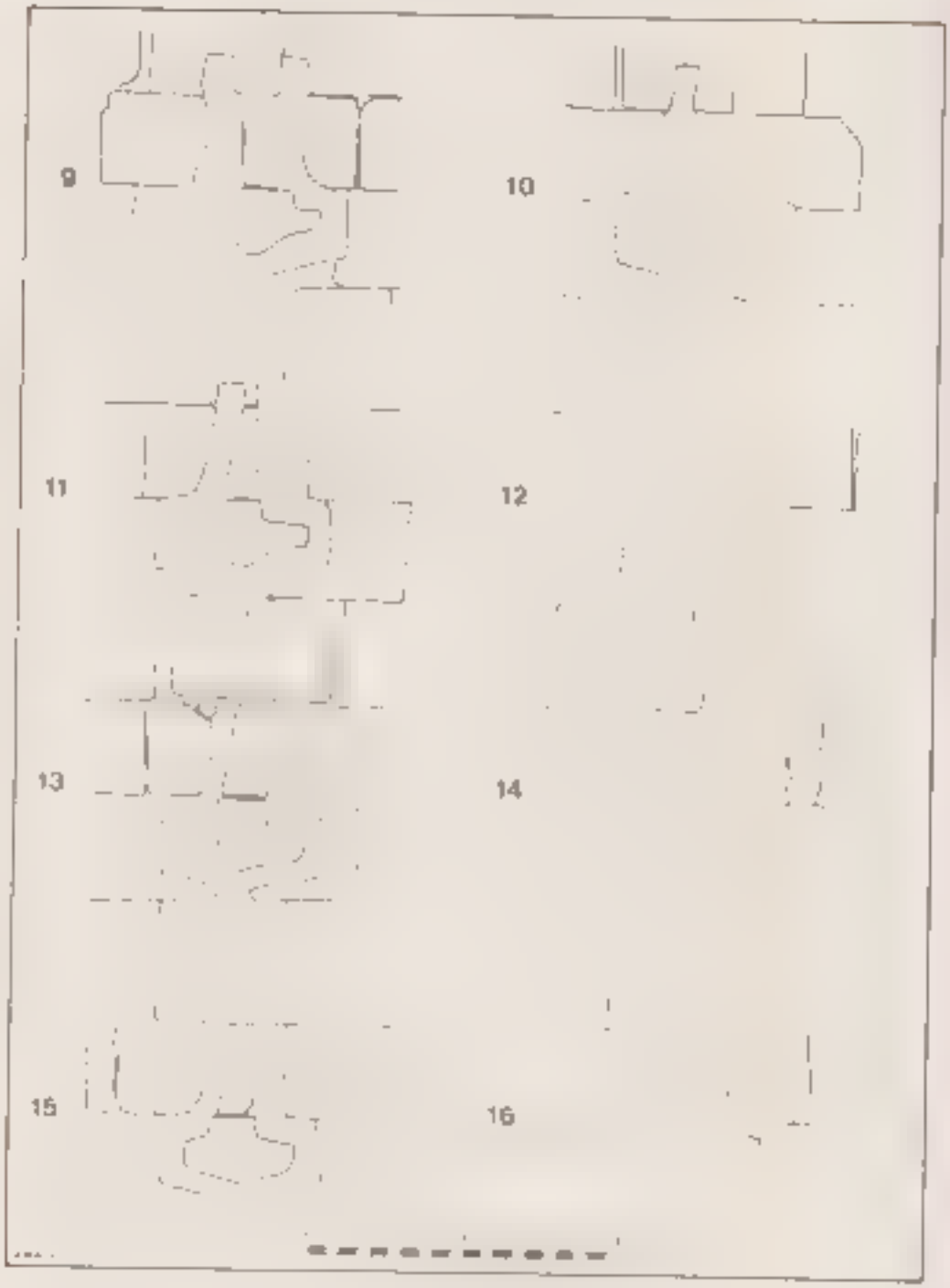


Fig. 29

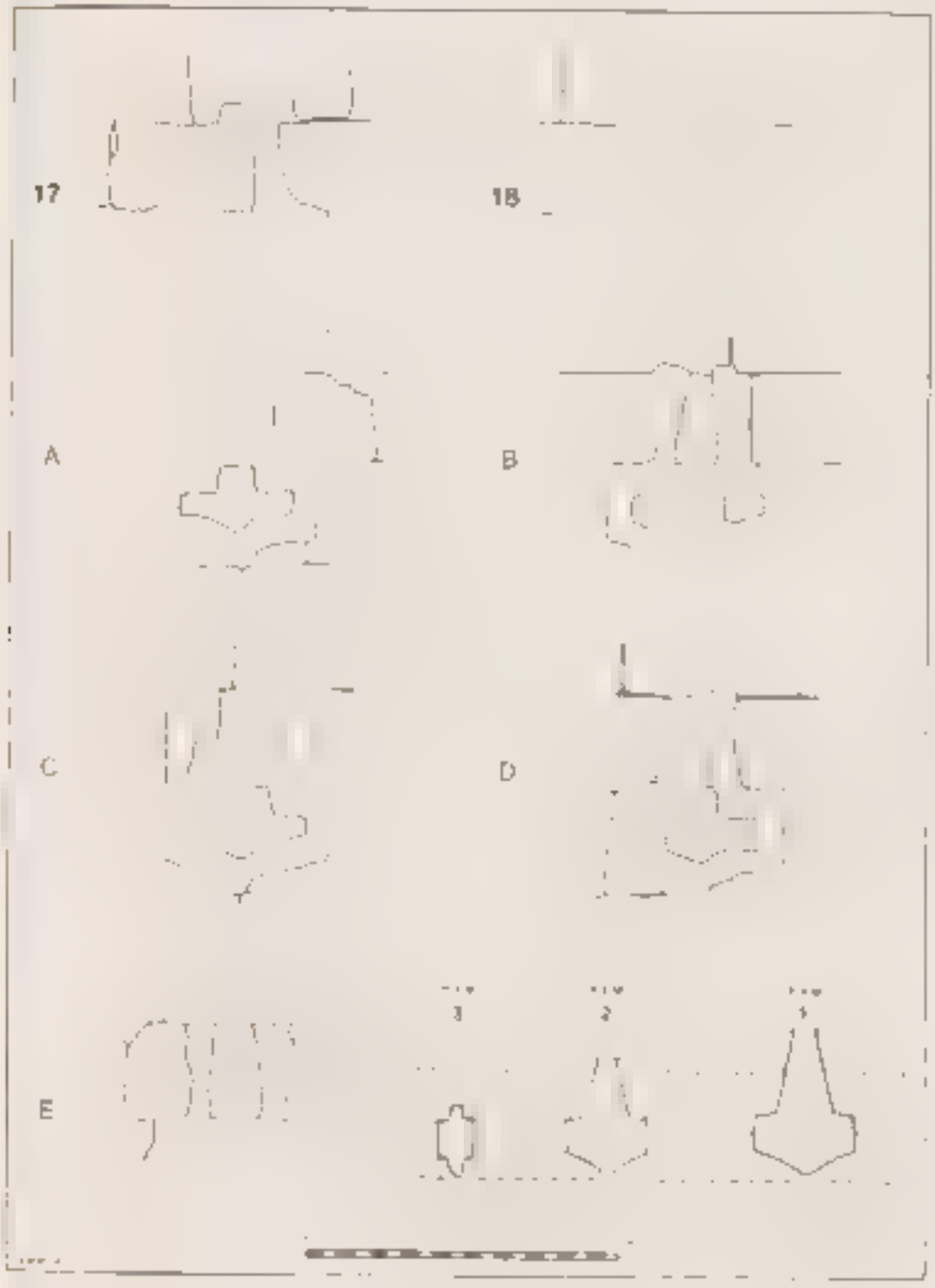


Fig. 22

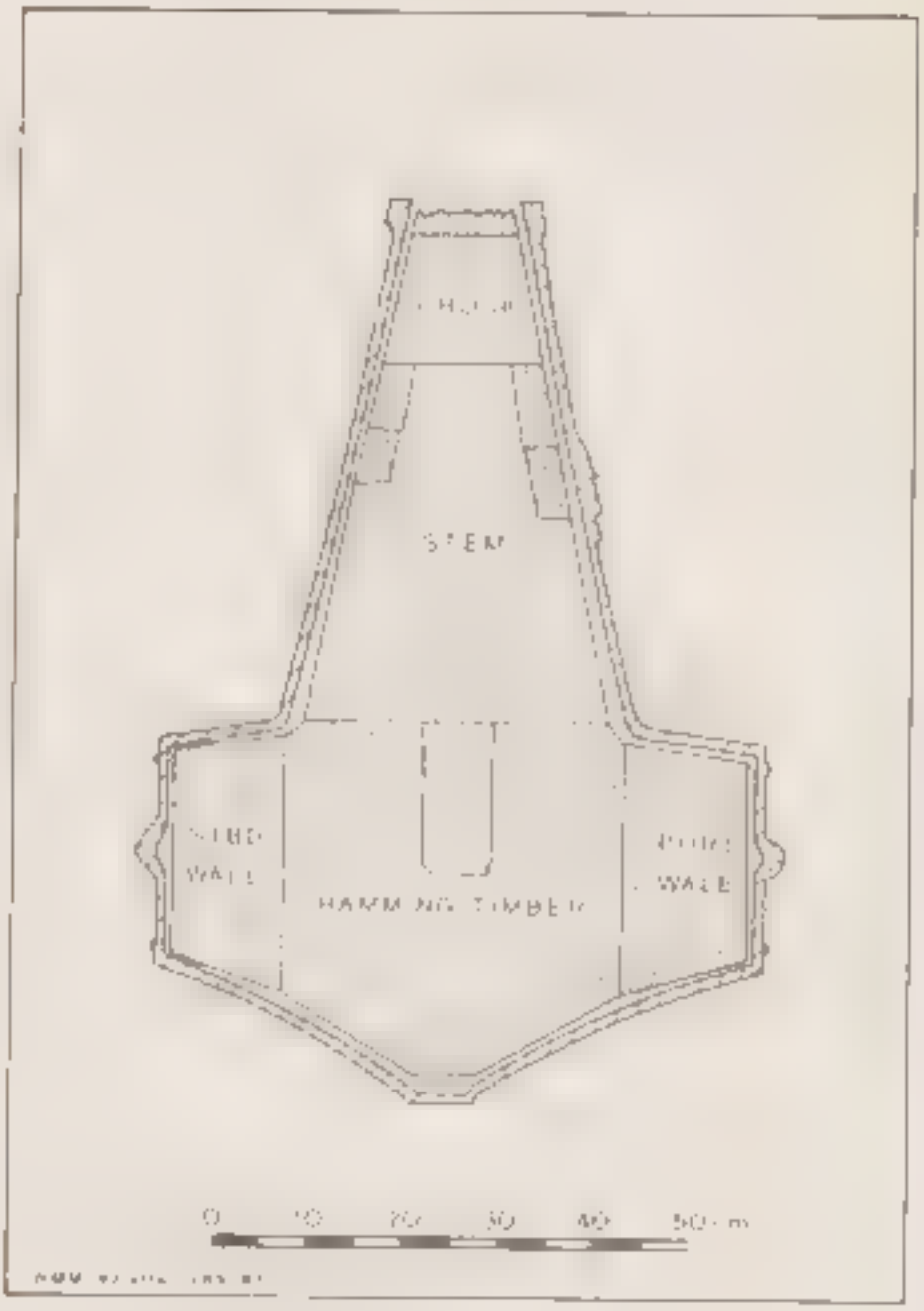


Fig. 21

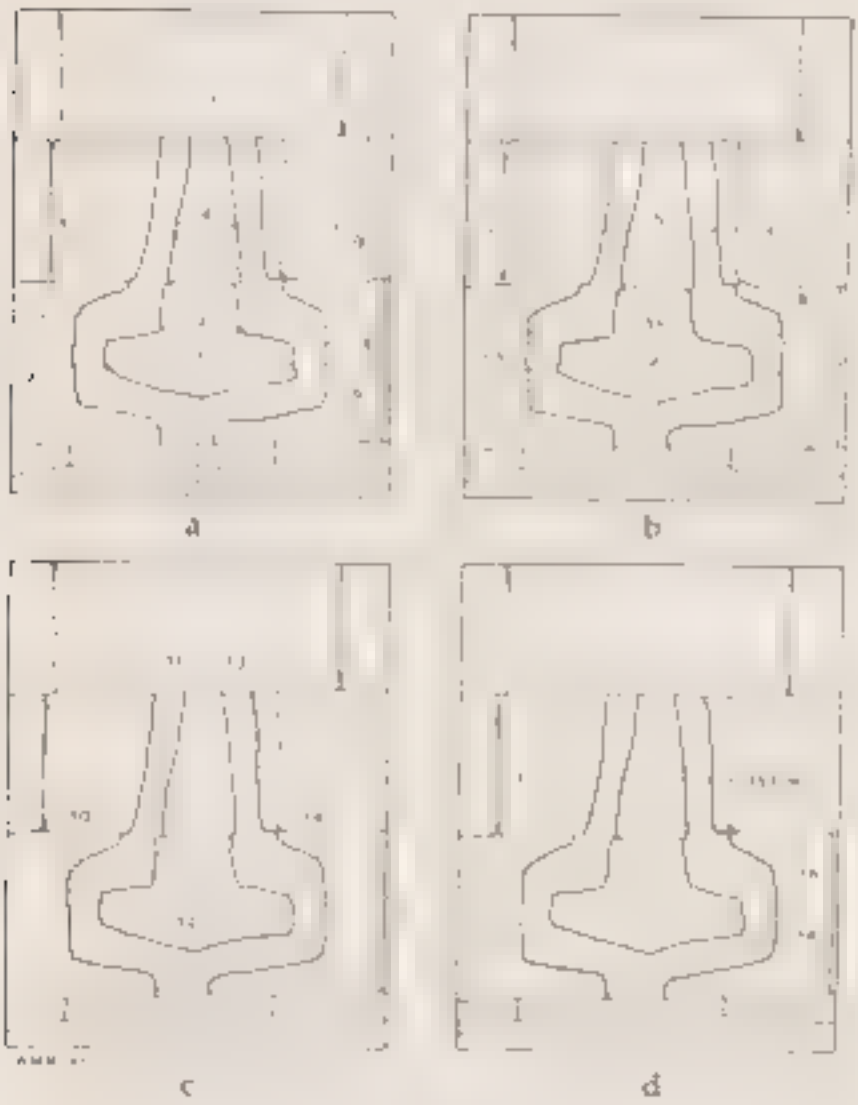


FIG. 24.

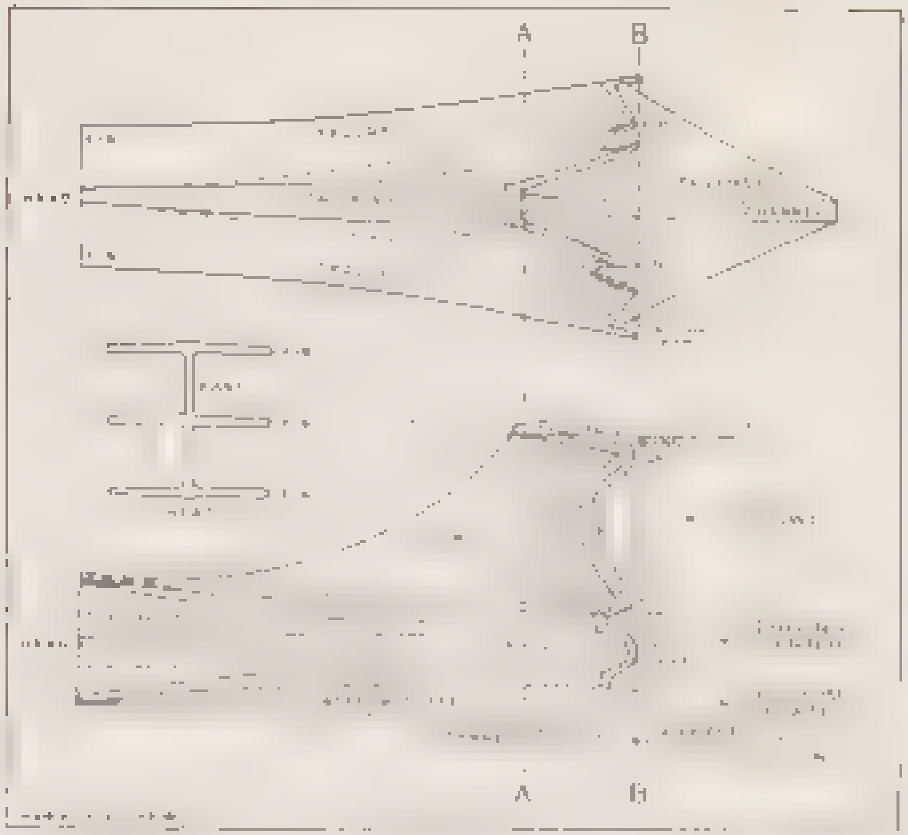


Fig. 25

cording each socket's contours with a large profiler, the actual shapes of individual rams can also be recovered. Direct information, therefore, from the bows of 23 warships that fought in the Battle of Actium is provided by a careful analysis of the sockets. More precious to nautical historians than a shipwreck full of rams, Octavian's Campsite Memorial graphically demonstrates the relative sizes of the large polyremes comprising the navies of the Hellenistic period. In effect, this memorial preserves information once thought lost forever.[1] In order to tap it, however, a system of measurements must be defined which accurately records the important features of each socket (see Table 1).

[1] For a discussion of the problems involved in identifying the various classes of ancient warships, see Chapter 5.

Table 1:
Measurement Definitions (cf. Figs. 23–25)

Note: the "core" designates the preserved [illegible] section of each socket which originally fit inside each ram mounted on the wall. The "A" line is 0.9 m from the top of the [illegible] and is intended to represent the approximate height of the Athlit ram; it is intended to provide a point of comparison between the different sockets and the Athlit ram. The "V" line is roughly perpendicular to the "A" line and is intended to represent the center-line of each socket. If the original placement of the socket was not exactly vertical, then the "V" line will not be perpendicular to the "A" line.

Measurement	Definition
#1	the width of the core from wall to wall
#2	the greatest exterior width of the cutting from wall to wall
#3	the width of the core at the base of the stem
#3A	the exterior width of the cutting at the base of the stem
#4	the width of the core at the "A" line
#5	the exterior width of the cutting at the "A" line
#6 L	the height of the core at the top of the left wall
#6 R	the height of the core at the top of the right wall
#7 L	the exterior height of the cutting at the top of the left wall
#7 R	the exterior height of the cutting at the top of the right wall
#8 L	the height of the cutting's left side
#8 R	the height of the cutting's right side
#15A L	the width of the cutting's left side at the "A" line
#15A R	the width of the cutting's right side at the "A" line

Profile #	Definition
#10	the after end of the top trough
#11	the after end of the [illegible] and the depth of the bottom plate between the [illegible] and the trough's left side
#12	the depth of the bottom plate [illegible] at the "A" line
#13	the after end of the [illegible] and the depth of the bottom plate between the [illegible] and the trough's right side
#14	the after end of the right trough
#15B	cross section of the [illegible] (see also Table 2, #15B)
#16	the after end of the top of the trough
#17	see note [illegible]
#18	the after end of the bottom plate

It should be noted here that [illegible] the socket and not the original ship. [illegible] from the perspective of the ship [illegible] and the socket's right was the ship's [illegible].

[illegible] A cross section [illegible] #15 [illegible] is designated as #15B. [illegible] #17 was [illegible] because the depth of the profile was uniformly [illegible] profiles #10 and #11 and measurements #1 and #2.

b. The Sockets: Methodology of Measurement

Measuring the cuttings involved many problems. Since our methodology determined the values we recorded, it seems appropriate to describe here the procedure we employed. First, we had to establish some fixed benchmark to which anomalies in the wall's structure could be referred. Because the wall slumped badly from west to east, and because we wanted to measure the degree of each socket's horizontal displacement, we decided to transect each cutting with a horizontal baseline. Three separate baselines were laid out along the face of the wall with a transit and marked in blue chalk with a carpenter's chalk line. BL 1 (baseline) ran between sockets [1] and [13]; BL 2 from [13] to [18], and BL 3 from [A] to [E]. BL 2 was placed 1.02 m. beneath BL 1, and BL 3 0.605 m. beneath BL 2. Between the [illegible] of [1] and [13], the top of the first course has slumped downward, from west to east, 2.465 meters.[1]

Next, we developed a standard procedure for obtaining and recording the measurements we intended to extract from each socket. This was necessary in order to reduce the number and magnitude of errors made during the recording process. All measurements for each socket were recorded 1) on a separate standardized recording sheet, 2) in the same sequence, 3) according to the same system, and 4) by the same person, S.P. Murray.

Finally, we employed a measuring template specifically designed for the peculiarities of this monument. It consisted of two 2 inch by 0.5 inch pieces of stainless steel rectangular tubing, each a meter long and drilled with holes at 2 cm. intervals along the entire length of the steel (Fig. 26). For measuring the wall sockets at the western end of the wall, the two drilled sections could be joined end to end by means of a slip-joint. The holes in each section were just slightly larger than steel rods made from quarter inch dowel stock which could be inserted through the template and thus pushed into the cutting at right angles to the surface of the wall. The depth of the socket at this particular point was then read from the rod which was marked in centimeter intervals. A second set of holes which accepted a support apparatus of moveable arms and pipes enabled us to position the template anywhere we desired along the face of the wall.[2]

By using this measuring device (hereafter abbreviated "MD"), we were

[1] [illegible] progressive downward slumping of the wall [illegible]

[2] The support device was built by Mr. [illegible] [illegible] Rube Goldberg [illegible] we named this device the "Dragon."

able to record the dimensions identified in Table 1 with a high degree of consistency. In addition, we adhered to the following procedures which were applied uniformly to each cutting. In the list below, each measurement number is paired with a reference (in parentheses) to the appropriate segment of Figure 24 and is followed by a brief description of the procedure utilized to recover each dimension. The words "socket" and "cutting" are used interchangeably; "exterior" is used to define areas away from the center-line of the socket.

Table 2
Measurement Procedures

Measurement #	Procedure [illegible]
#1 (Fig. 24a)	Taken with a tape measure from edge to edge along the outer surface [illegible] MD when the outer edge of the [illegible] preserved.
#2 (Fig. 24b)	Taken with a tape [illegible] MD [illegible] used to measure the distance between [illegible] the socket of the cutting [illegible].
#3 (Fig. 24a)	As with #1, taken with tape or MD as appropriate. [illegible] MD [illegible] original surface of the socket and [illegible] original surface.
#3A (Fig. 24b)	As with #2, taken with the tape or MD as appropriate (cf. #3).
#4 (Fig. 24a)	Widest surviving dimension taken with tape or MD as appropriate (cf. #1).
#5 (Fig. 24b)	Narrowest surviving dimension taken with tape or MD as appropriate (cf. #4 [illegible]).
#6 (Fig. 24a)	Taken from the exterior upper corner of the socket at the wall to the top of the first course with tape or MD as appropriate (cf. #3).
#7 (Fig. 24a)	Taken from the exterior upper corner of the socket at the [illegible] to the top of the first course with tape or MD as appropriate (cf. #6).
#8 (Fig. 24b)	Taken with a tape or MD as appropriate (cf. #3).

[illegible] MD [illegible]

[illegible]

#9 (Fig. 24a)	As this dimension could be calculated from #8 and #6, we omitted recording it on most sockets.
#10 (Fig. 24c)	Taken with the MD at the cutting's deepest point in the area of the desired profile.
#11 (Fig. 24c)	As #10; also see "Offset" below.
#12 (Fig. 24c)	Since #15 provides the depth of the socket here, we generally did not record this profile.
#13 (Fig. 24c)	As #10; also see "Offset" below.
#14 (Fig. 24c)	As #10.
#15A (Fig. 24d)	Taken along the back wall of the socket.
#15B (Fig. 24d)	Taken with the MD when the interior of the socket exhibited an anomaly; if no anomaly existed, then #15A sufficed.
#16 (Fig. 24d)	Taken with the MD in such a way as to follow the deepest part of the socket.
#17	Not necessary as a profile.
#18 (Fig. 24d)	Taken with the MD in such way as to follow the deepest part of the socket; as a result, the profile was not taken as a straight line.
Offset	The face of the third course was set back from that of the second by about 4 cm. Variations in this dimension revealed that the positions of the second and third courses had shifted. The offset was measured on both the immediate left and right sides of each socket as well as on the center of the [illegible] axis. When taking profiles #11 and #13, we referenced the MD to the face of the second course block.

The catalog below presents in a systematic manner the surface measurements from each socket. If Figure 23 is compared with Figure 24, it can be seen that measurements #1, #3 and #4 represent width dimensions of the actual box timbers inside each ram. If we compare Figures 24 and 25, we see that measurements #2, #3A and #5 represent the width dimensions of the ram's after end somewhere between the cross-sections at the A and B lines in Figure 25. The actual height of the wale from the ram's bottom is between the values for #6 and #7, and the total height of the ram is represented by #8. The "L" and "R" in measurements #6, #8 and #15A represent measurements from the left and right sides of the socket, respectively. An asterisk (*) next to the meas-

We began measuring the profiles [illegible] above the upper edge of the cutting and [illegible]

[illegible] see infra Section 3.4.

Fig. 26

ornament indicates that additional observations appear in the "Remarks" section following the catalog; for the values in parentheses, see the "Remarks" for Socket [3]. All measurements are given in meters.

c. The Sockets: Catalog of Dimensions

Socket [1]:

#1	1.07*	#5	0.22*		
#2	1.08*	#6	L NA	R 0.58	
#3	NA	#7	L NA	R 0.64	
#3A	NA	#8	L NA	R NA	
#4	NA	#9			
Offset	NA	#15A	L NA	R NA	

BL1 to bottom of socket 0.36

Socket [2]:

#1	1.15	#5	1.22*		
#2	1.50	#6	L 0.65	R 0.67	
#3	NA	#7	L NA	R 0.51	
#3A	0.81*	#8	L NA	R NA	
#4	NA	#9			
Offset	NA	#15A	L NA	R 0.15 (preserved)	

BL1 to bottom of socket 0.36

Offset L 0.035 R 0.004 #15A L 0.205 R 0.045
core 0.035
BL1 to bottom of socket 0.54

Socket [9]

#1	0.86	#5	Core*	0.11	
#2	1.25	#6	L 0.465	R 0.305	
#3	0.54	#7	L 0.58	R 0.0575	
#3A	0.72	#8	L 1.49	R 1.47	
#4	0.35* (+ 0.01)	#9			
Offset	L 0.01 R 0.055	#15A	L 0.10	R 0.125	
	core 0.055				

BL1 to bottom of socket 0.665

Socket [11]

#1	0.845	#5	0.625		
#2	1.15	#6	L 0.555	R 0.60	
#3	0.525*	#7	L 0.67	R 0.665	
#3A	0.815	#8	L 1.38	R 1.485	
#4	0.10*	#9			
Offset	L 0.01 R 0.05				

BL1 to bottom of socket 0.90

Socket [31]

#1	0.865	#5	0.555*		
#2	1.12	#6	L 0.405	R 0.405	
#3	0.335	#7	L 0.61	R 0.65	
#3A	0.615*	#8	L 1.58	R 1.61	
#4	0.16	#9			
Offset	L 0.045 R 0.04	#15	L 0.095	R 0.0850	
	core 0.04				

BL1 to bottom of socket 1.01

Socket [32]

#1	0.86	#5	NA		
#2	1.10	#6	L 0.46	R 0.30	
#3	0.32	#7	L 0.66	R 0.655	
#3A	NA	#8	L NA	R 1.59	
#4	NA	#9			
Offset	L 0.035 R NA	#15A	NA		
	core NA				

BL1 to bottom of socket 1.13

Socket [33]

#1	0.74	#5	0.48*		
#2	1.03	#6	L 0.44	R 0.43	
#3	0.33	#7	L 0.54	R 0.515	
#3A	0.675* (+ 0.04)	#8	L 1.25	R 1.255	
#4	0.25	#9			
Offset	L 0.055 R 0.025	#15A	L 0.21	R 0.12	
	core 0.030				

BL2 to bottom of socket 0.295

#1	0.80"
#2	1.055
#3	0.34"
#3A	NA
#4	NA?, similar to [13]
Offset	L 0.03 R 0.05

BL2 to bottom of socket = 0.435

Socket [14]?

#5	0.465		
#6	L 0.49	R	0.50
#7	L 0.55	R	0.59
#8	L 1.24"	R	1.24"
#9	--		
#15A	NA		

#1	0.67
#2	1.005
#3	0.30
#3A	0.565"
#4	0.175
Offset	L 0.04 R 0.035
	cone 0.03

BL2 to bottom of socket = 0.565

Socket [15]

#5	0.50"		
#6	L 0.50	R	0.505
#7	L 0.56	R	0.56
#8	L 1.23	R	1.24
#9			
#15A	L 0.12	R	0.12

#1	0.72"
#2	0.95"
#3	0.42"
#3A	0.53 to 56"
#4	NA
Offset	NA

BL2 to bottom of socket = NA

Socket [16]

#5	NA		
#6	L NA	R	NA
#7	L NA	R	NA
#8	L NA	R	NA
#9	NA		
#15A	NA		

#1	NA
#2	1.12"
#3	0.40"
#3A	0.74"
#4	0.545"
Offset	NA

BL2 to top of 3rd course = 0.49

Socket [17]

#5	0.68"		
#6	L NA	R	NA
#7	L NA	R	NA
#8	L NA	R	NA
#9	L NA	R	0.82
#9A?	L NA	R	0.73
#15A	L 0.125"	R	0.105

#1	NA
#2	NA
#3	NA
#3A	NA
#4	0.295"
Offset	NA

BL2 to top of 3rd course = 0.18

Socket [18]

#5	0.42"		
#6	L NA	R	NA
#7	L NA	R	NA
#8	L NA	R	NA
#9	L NA	R	NA
#15A	L 0.01	R	0.105

#1	0.715
#2	0.98
#3	0.24 0.26"
#3A	NA

Socket [A]

#5	NA		
#6	L 0.455	R	0.465
#7	L NA	R	0.53
#8	L NA	R	NA

#4 NA
Offset R - 0.03
BL3 to bottom of socket - 0.555

#5 L - NA R - NA
#15A L - NA R - NA

Socket [B]

#1 0.83
#2 1.105
#3 0.535
#3A 0.545
#4 0.23
Offset L - 0.06 R - NA
core - NA
BL3 to bottom of socket - 0.265

#5 0.50*
#6 L - 0.45 R - 0.48
#7 L - 0.565 R - 0.565
#8 L - 1.29 R - 1.295
#9
#15A L - 0.14 R - 0.12

Socket [C]

#1 0.845
#2 1.175
#3 0.40*
#3A 0.745*
#4 0.285
Offset core - 0.06
BL3 to bottom of socket - 1.01

#5 0.555
#6 L - 0.455* R - 0.45
#7 L - 0.565 R - 0.565
#8 L - 1.245 R - 1.06
#9
#15A L - 0.14 R - 0.14

Socket [D]

#1 0.255
#2 1.025
#3 0.235
#3A 0.52
#4 0.165*
Offset R - 0.025
BL3 to bottom of socket - 1.22

#5 0.45*
#6 L - 0.415 R - 0.475
#7 L - 0.615 R - 0.645
#8 L - 1.18* R - 1.365
#9
#15A L - 0.12 R - 0.14

Socket [E]

#1 NA
#2 1.03-1.12*
#3 NA
#3A 0.62* (- 0.055*)
#4 0.31
Offset L - 0.06 R - NA
core - 0.03
BL3 to bottom of socket - NA

#5 0.57* (- 0.06)
#6 L - NA R - NA
#7 L - NA R - NA
#8 L - NA R - NA
#9
#15A L - 0.12 R - 0.16* (- 0.06)

7. Remarks on the Catalog of Dimensions

Socket [1]. Measurements #1, #2 and #5 were calculated by doubling the appropriate distance from the preserved features to the "y" line. Since all cuttings are slightly asymmetrical, these "restored" measurements must represent approximate values only. Hereafter, such measurements will be denoted as being "calculated from the 'y' line."

Socket [2]. Measurements #3A and #5 are calculated from the "y" line, cf. [1] above.

Socket [3] The upper right fourth course block of this cutting has shifted since its original placement and the original height of the socket (#5R) would have been about 2 cm. higher. Since other blocks have shifted from their original positions as well, this has resulted in the opening of gaps between the blocks of this cutting. As a result, the values indicated in parentheses must be subtracted from measurements #2 and #5 to arrive at the original dimensions.

Socket [4] Block shifting has created a 2 cm. gap which must be subtracted from measurements #3A, #4 and #5, cf. [3] supra.

Socket [5] Measurement #1 is calculated from the "x" line because the left side of the cutting is broken. The preserved width is 0.95 m. Measurements #5L and #5R are estimated from traces on the back wall of the socket.

Socket [6] Measurement #3 was taken from the core where it is broken back from the wall's surface. Since the side of the core tapers inward (proceeding from the back of the socket to the surface), the width of #3 would have been originally about 2 cm. narrower at the wall's surface.

Socket [7] The preserved width of measurement #1 is presented in the table, but the course is badly broken. If the measurement is calculated from the "x" line, the width would be 0.90 m. Since the ends of the wales are preserved, measurements #6L and #6R are taken from the depth of the preserved surface closest to the original end of the wales. Measurement #7L is taken from traces of what appear to be the original surface which has since largely broken away. Block shifting has created a 2.5 cm. gap which must be subtracted from measurement #5.

Socket [8] Block shifting has created a 4 cm. gap which must be subtracted from measurements #1 and #2. Measurement #1A is calculated from the "x" line, and measurement #6L is taken from traces on the back wall of the socket.

Socket [9] Block shifting has created a 3 cm. gap which must be subtracted from measurement #4 and #5.

Socket [10] A 1.5 cm. gap exists between the two blocks that compose the second course of the core which might affect measurement #3. But since no evidence of shoring is visible anywhere, this gap must have originally existed when the wall was constructed; it would have been invisible with the stucco mounted on the cutting. Measurement #4 is calculated from traces on the right side of the socket and the "x" line.

Socket [11] Measurement #3A is taken from traces on the right side of the socket; measurement #5 is also taken from traces on the right side.

Socket [12] Since this cutting is poorly preserved, most measurements were taken from traces preserved on the interior of the socket.

Socket [13] Block shifting has created a 4 cm. gap which must be subtracted from measurement #3A. The right side of measurement #5 was taken from traces of the original edge.

Socket [14] Since this cutting is poorly preserved, most measurements

were taken from traces. The traces for measurements #1, #3, #4 and #6 are very faint, and the values recorded must be accepted as approximate only. Measurement #4 is not preserved, but the width of the stem can be made out: some 12 cm [illegible].

Socket [15]: Block shifting has created a 3 cm gap which must be subtracted from measurement #3A. The right side of measurement #5 was taken from traces of the original edge.

Socket [16]: Because of the [illegible] and poorly preserved nature of this cutting, measurements #1, #2, #3 and #3A are recorded from faint traces and are therefore approximate values.

Socket [17]: Because of the [illegible] surface of this cutting and its broken left side, measurements #2 and #4 are calculated from an approximate C-L line; #3, #4, #5 and #7 were taken from traces. Measurement #9A represents the distance from the upper right corner edge of the scale to the top of the third course.

Socket [18]: Measurements #4 and #5 are taken from traces.

Socket [A]: Measurement # [illegible] natural irregularities on the surface [illegible] just above this bump, however [illegible].

Socket [B]: Measurement #5 is taken from traces on the right side.

Socket [C]: Measurements #3 and #4 are calculated from the C-L line; measurement #6 is taken from traces.

Socket [D]: Although a gap of [illegible] exists between the two blocks that make up the stem, it is possible that the gap is original and that no shifting has occurred. If so, the gap [illegible] should be subtracted from measurements #1 and #2. Measurement #8 is taken from the true cutting at the top of the third course, not from the shallow impression in the bottom of the fourth course.

Socket [E]: Because of the [illegible] nature of the cutting, measurement #2 is calculated from the C-L line. Possible traces on the left side of the socket might indicate that the left side is broken; if so, the original measurement should be [illegible]. A gap of 3.5 cm appears between the two blocks of the third course. What appears to be a carved [illegible] in the cutting, which might indicate that the gap is an original feature of the wall. If so, the width of the gap should not be subtracted from measurements #3A, #5 and #15AB. Measurement #5 is taken from a broken right edge; as a result its value is approximate. The [illegible] for measurement #15AB is also approximate.

d. The Profiles of the Sockets (Figs. 27–29)

We have already mentioned that the interior surfaces of the sockets preserve the outline of each [illegible]. By overlapping profiles #13, #14 and #15, a composite view of the socket's right side can be drawn, and a similar view of its left side can be drawn from profiles

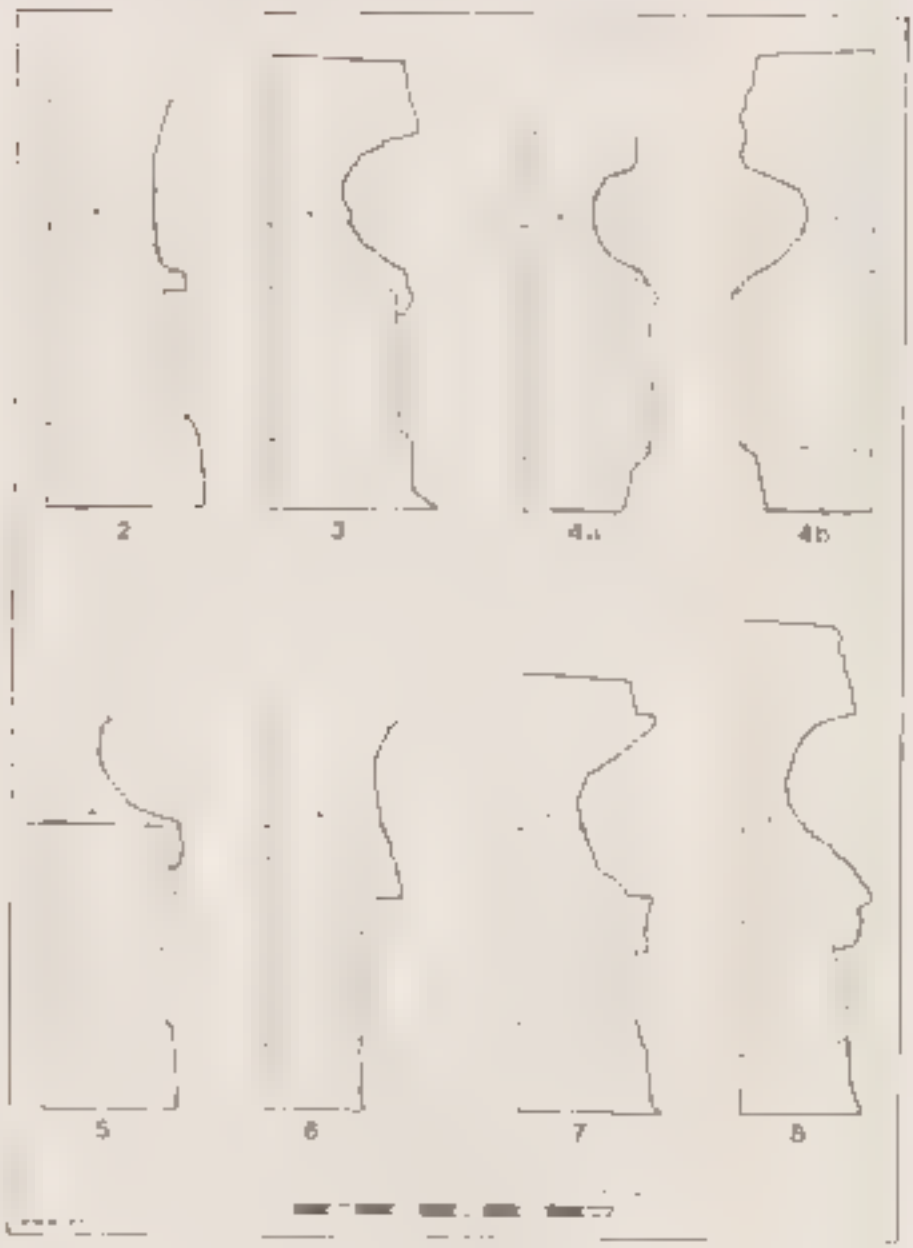


Fig. 27

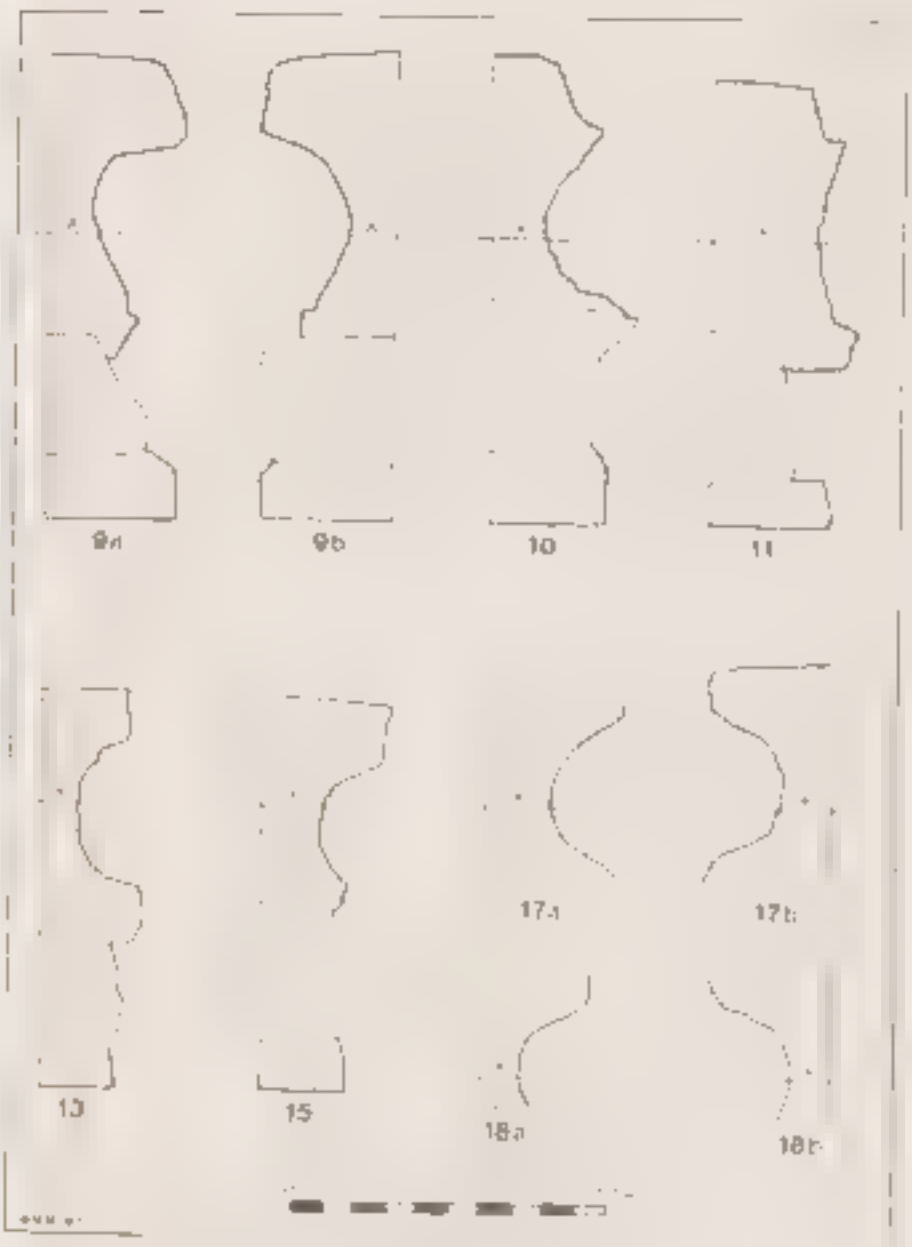


Fig. 28

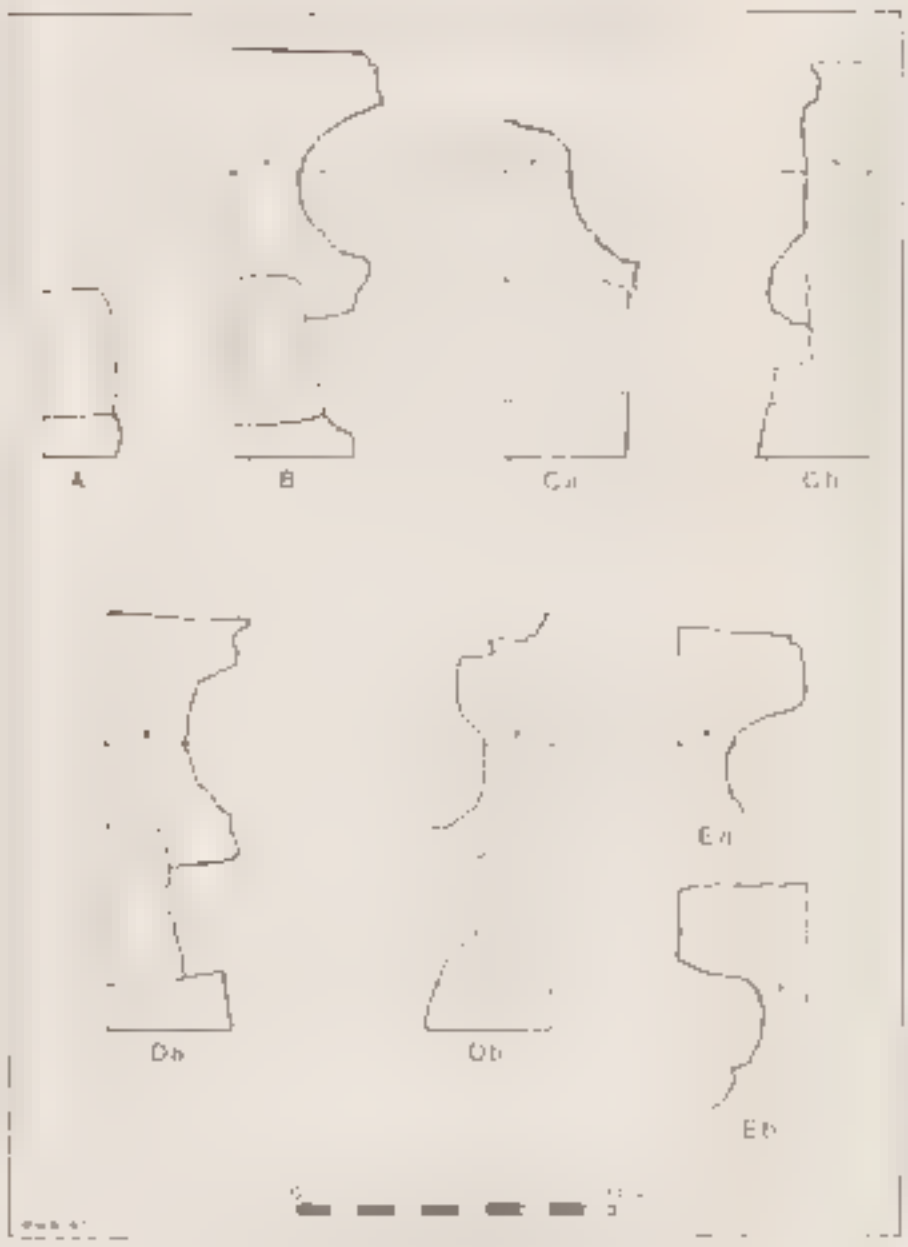


Fig. 29

#10, #11 and #18. Unless the two sides differed significantly, we have chosen to represent only the sockets' right sides, in effect reproducing a view of each ram's port after-end.

Reference to Figure 25 will help the reader visualize what these profiles represent. If the Athlit ram were mounted on the Campsite Memorial, the stippled section between lines A and B represents the portion of the ram contained within the socket. The A line represents the surface plane of the wall, and the B line the deepest extent of the socket with the ram's tailpiece removed. Strictly speaking, were the Athlit ram to be mounted on this wall, an extra deep recess would have to be carved at the socket's bottom to accommodate its long tailpiece. We have represented the socket area in Figure 25 without the tailpiece, however, because this corresponds more closely to the actual profiles preserved by the sockets of the monument.

Figure 27 presents the after-ends of the rams that once occupied sockets [2]–[8], Figure 28 presents [9]–[15], and Figure 29 shows [A]–[E]. Sockets [4], [9], [12], [18], [C], [D], and [E] have been represented from both sides: "a" represents the left side of the socket (the ram's starboard side) and "b" its right side (the ram's port side). In each case the straight vertical line is intended to represent the surface plane of the wall, and the thick undulating line the depth of the cutting as plotted from the values recorded with the profiler (i.e., the MDP). The rough section of each view (provided by profiles #10 and #11, depending on the side) is indicated by stippling. Note the "x" line indicated on each of the reconstructed views represents a height of 0.50 m. from the bottom of the socket and allows for an easy comparison with the highlighted section in Figure 25.[illegible]

e. The Original Number of Rams on the Campsite Memorial

In addition to the dimensions and profiles of each socket, we also measured the intervals between the cuttings. These intervals, expressed as the distance between the center lines of adjacent sockets, are presented in Table 3. A comparison of these values allows us to calculate the total number of rams originally displayed on the wall. Although it is impossible to be certain, socket [1] seems to have been for the first ram displayed on the western end of the terrace. Space exists for another ram to the west of [1], although it seems unlikely that such a large object would have been placed this close to the corner of the monument.[illegible] Two

[illegible] For further analysis of the sockets and the types of rams revealed by these profiles, see Chapter III.

[illegible] If a ram equal in size to [1] were placed to the west of [1], its center would have been located [illegible] m. from the western corner [illegible]. This placement seems a bit close to the edge of the terrace. By contrast, the center of socket [1] [illegible] would originally have been [illegible] m. from the western edge of the terrace. This placement seems a bit more appropriate for such a large object and would correspond more closely to the beginning of the inscribed text (see infra Section 3.b).

rams spaced 1.78 meters apart would have filled the gap between [18] and [A], and eight to ten rams spaced at intervals of 1.5–1.8 m might have occupied the unexcavated section east of [1]. These 10 to 12 additional rams plus the 23 currently visible would make the appropriate total of rams originally displayed on the monument somewhere between 33 and 35.

It is also possible (though we think it unlikely) that the rams displayed on the eastern end of the wall were so small that a "sock" interval less than 1.5 m would have resulted. For example, the small ram recently acquired by the Deutsches Schiffahrtsmuseum in Bremerhaven has a maximum width of 0.29 m, as compared to the 0.755 m of cutting [13] for this ram (see Chapter III, p. 33). Since three to four rams of this small size would fit into the linear space occupied by sockets [15] and [16], 33 should be seen as the minimum number of rams originally displayed on the monument. If very small weapons occupied the extreme eastern end of the wall, 40 or more rams may have been originally displayed on the Campsite Memorial.

There are good reasons, however, to prefer the lower total over the higher one. First, one wonders if the original number (whatever it was) does not represent a tithe from the total number of captured ships. A tithe is certainly what one would expect in a dedication to the gods of captured war equipment. If the dedication represents a tithe as we think it must, then the total 33 to 35 corresponds well with the number of ships Augustus himself recorded as having been captured from the enemy. According to Plutarch (*Ant.* 68.1), Augustus wrote in his *Memoirs* that 300 ships were captured in the battle (or, more likely, in the war; see Chapter VI, Section [illegible]). Since Augustus fails to count vessels smaller than triremes for the total of captured warships presented in his *Res Gestae* (cf. Chapter III, n. 25), 330 to 350 seems to represent a more accurate value for the complete total of ships captured from Antony and Cleopatra during the Actian War. And for this reason, we prefer not to restore a large unknown number of small rams on the eastern end of the wall.

If 3 rams were restored in the gap between [18] and [A], the 4 intervals would have averaged 1.78 m. Although three rams actually fit, the resulting [illegible] interval is too small. We have therefore chosen the larger interval resulting from the restoration of two rams in this section.

Table 3:
[illegible] Measurements

Note: The value for the 0-[1] measurement represents the distance from the calculated western edge of the terrace to the center line of socket [1]. The distance from [A]-[E] measures 45.[illegible] m along the face of the wall.

Socket #	[illegible]	Socket #	[illegible]
0-[1]	3.875	[12]-[13]	[illegible]
[1]-[2]	2.12	[13]-[14]	[illegible]
[2]-[3]	1.87	[14]-[15]	[illegible]
[3]-[4]	1.96	[15]-[16]	[illegible]
[4]-[5]	2.015	[16]-[17]	[illegible]
[5]-[6]	[illegible]	[17]-[18]	1.61
[6]-[7]	[illegible]	[18]-[A]	[illegible]
[7]-[8]	[illegible]	[A]-[B]	[illegible]
[8]-[9]	1.775	[B]-[C]	[illegible]
[9]-[10]	[illegible]	[C]-[D]	[illegible]
[10]-[11]	[illegible]	[D]-[E]	[illegible]
[11]-[12]	[illegible]		

4. The Sequence of Construction

During the process of mapping the podium and recording the dimensions of the cuttings, we observed certain construction details. These led, in turn, to the following speculations on the sequence of the monument's construction. Although the hillside terrace had probably been leveled somewhat to receive Octavian's tent, it was no doubt "regularized" further after the decision was made to build a memorial on the site. This would have involved the smoothing of its surface and the trimming back of its sides to receive retaining walls. At this stage, the length of the upper finished terrace was measured according to the number of rams to be displayed and the desired spacing between them. Next, a terraced "step" was cut in the southern flank of the hillside beneath the level of the original campsite to serve as a platform for the ram display. Shallow trenches were then dug along the trimmed-back margins of the hillside terrace and filled with concrete and mortar to serve as a foundation for the retaining walls to be built along the west, south and east sides of the upper podium. Heavy rectangular blocks of limestone were then laid on this concrete foundation and were clamped together with iron "double T" clamps set in lead.

Concrete masses in front of cuttings [3], [13], [15] and [A], [E] reveal that a retaining wall backed by a core of concrete was built to contain the pressures of the lower terraced "step" as well. The original limestone facing of this lower terrace which supported the ram display has not

survived except for six large blocks along the side of the modern road. Nevertheless, a retaining wall must have existed, and would have been laid in a manner similar to the surviving retaining wall of the upper terrace or podium. According to evidence from the south wall of the podium, the core for this lower terrace was probably poured behind the wall in stages as the masonry rose course by course.

Along the western retaining wall, there is clear evidence of concrete on top of an in situ facing block of the inner row. It seems likely that after the two rows of blocks were laid on their concrete footer, additional concrete was poured behind them. Next, the second course was laid on the exterior block only, and then concrete was poured over the inner block up to the level of the exterior second course. The inner block was intended to serve, therefore, as a large regular caementum. The irregular use of headers in the retaining walls indicates, as well, that the architect who built the podium conceived of the wall and its concrete core as an integral structure. This perception on the part of the architect is remarkable for the time.[illegible]

After the lower terrace for the ram display was finished, and after at least two courses of the main southern retaining wall were clamped firmly in place, it seems that the rams were placed on the lower terrace near enough to the wall for their sockets to be carved. Superfluous clamp cuttings in the sides of the cuttings in sockets [8], [11], [9] (fig. 30) and [14] show that these sockets were carved into one side of the "double T" clamps holding the second course together. (Obviously the clamps were removed [or were never installed].) But the unaffected half of the clamp cutting still bears witness to the original sequence of construction.[illegible]

At this point, the rams were placed in their sockets and the outward flares of their cowls carefully measured. This enabled the masons to carve carefully the third blocks of each socket to match the expanding flare of each ram's port and starboard cowl. When these blocks were carefully lowered into place, they served to lock each ram into its individual socket by the flare they exhibited. This sequence of construction seems amazingly difficult, yet any other fails to take into account the socket's outward flare at the level of the third course (i.e., the back of

[illegible] See Blake 1947, p. [illegible]; clear examples of bonding between the facing wall and its concrete core are rare before the end of the Augustan period. The fact that headers were used in the [illegible] of [illegible] is probably due to the architect's concern over the pressure the [illegible] would have [illegible], since they were built on the side of a hill.

[illegible] In other words, the blocks of the second course were set side by side and cuttings were carved in their [illegible] for [illegible] double T clamps. In sockets [8], [11], and [14], the clamp cuttings [illegible] of block [8] [illegible] to the right side of the [illegible]. The purpose of the clamps was [illegible] to keep the blocks from shifting when the concrete was poured behind them. In any event, the clamps must have been removed when the sockets were carved. A similar [illegible] clamp cutting in the second course [illegible] of socket [illegible] [illegible] and the left block of the [illegible] (now broken away) and would have remained in place when its socket was carved.

Fig. 30

the cutting was wider than its front). There can be no other explanation: the curious expanding flare in the cuttings of this course was clearly intended to follow the exterior dimensions of each rostrum (cf. the difference in sections along the A and B lines in fig. 25).

After the third course had been set and clamped in place, concrete was again poured behind the wall to create a bond with the headers placed at irregular intervals in this course.[illegible] Once this concrete backing had set, double rows of blocks (i.e., one laid in front of the other) were laid as the fourth and fifth courses, although the inner row of blocks seems not to have been continuous.[illegible] Although no exterior blocks from the fifth course remain, the mass of tumbled blocks appearing in the 1913 photograph (fig. 3) must originate from this course. The inscription may then have occupied the sixth course which was crowned in turn by at least another course as indicated by dowel cuttings on the tops of the inscribed blocks. We do not know if these upper courses were laid in double or single rows, nor do we know the wall's original height or exact placement of its upper portion, which may, for example, have been stepped back into the hillside.

[illegible] The left, third course block of socket 12 has not survived. A small impression of its back side remains, however, in the concrete still in situ that was originally poured behind the block.

[illegible] Evidence for this feature can be seen clearly above sockets [illegible] and [illegible]. Gaps in the inner row of blocks were filled with concrete (and thus are original to the monument) [illegible] of the fourth course at sockets [illegible] and [illegible] (see fig. [illegible]).

g. The Photo Mosaic

Because of the increasing damage caused by the roots which grow behind and between the blocks, we wanted to record as accurately as possible the relative positions of the blocks currently in situ. We decided to do this by making a photographic record of the podium's south facade. The problem involved maximizing the optical distortion from the camera lens. The procedure we employed is described in detail to substantiate the accuracy of our final image (figs. 37–39).

First, we utilized a 50 mm. macro lens to keep the image as sharp as possible at the borders of the frame. Next, we established 5.0 m. as the maximum distance from the wall that the terrain would allow us to align our tripod with the middle of each socket. When the front of the lens was set at this distance, approximately 2.15 m. of the wall's facade was included in the camera's field of view. Allowing for a 30 percent overlap between each frame to minimize distortion at the edges of each image, we repositioned the camera at 1.50 m. intervals along the face of the wall before shooting adjacent images.

To help lay out these points, we used a straight piece of wood, 1.5 m. long. A long line which had been knotted half way along its length was attached and the string pulled tight (see fig. 31), its length was adjusted to form an isosceles triangle with a height of exactly 5.0 m. from the leg formed by the stick. Beginning at the west, one person positioned the stick on the south wall's face and marked several positions on the stones with blue chalk. A second person held the string's knotted

Fig. 31

center and pulled it tight. Once a proper isosceles triangle had been formed, this same person dropped a plumb bob from the apex of the triangle and a third person marked the spot on the ground with a long nail thrust through a bright yellow piece of surveyor's tape. This procedure produced focal points for the camera lens at 1.5 m. intervals regardless of the wall's slumping undulations, except at the wall's western end. Here the terrace which once supported the wall stops abruptly. As a result, the frames shot to the left of socket [5] had to be taken from the top of our car at a distance greater than 5 m. and enlarged in the darkroom to the same scale when we printed the final segments of the mosaic.[illegible]

For each position marked in front of the wall, the tripod was positioned so that the front of the camera lens sat directly over the nail head; a plumb bob was dropped from the lens to the ground to verify its position. The camera was set in a horizontal position by means of a bull's-eye level attached to its flash shoe, and its elevation was adjusted to correspond to the center of the cutting. After the camera's position was judged to be correct, a 10 cm. square was placed along the wall's face near the edge of the frame (in an area destined to be cropped from the final print), and the picture was taken. A second frame was exposed with the camera turned in a vertical position (i.e., with the longer axis of the camera's field of view placed at right angles to wall's base) after the lens was again positioned over the nail head. Before the pictures were taken, a thin yellow line was run across the surface of the wall at the level of the sockets' baselines. Since this line was horizontal, its position in each photograph acted as a guideline which helped tremendously in the final process of joining the individual prints.

Although the images we obtained are satisfactory, we would make the following changes were the task to be repeated. First, the camera lens should be kept at the same precise elevation relative to the wall's courses for each photograph. Second, a camera with a larger format (like one which produces a 4 by 5 inch negative) would yield a much sharper image. Third, a line marked in meters should be placed in the gap between [18] and [A] and to the left of [1] to insure the correct joining of the printed photos. And finally, a taller tripod or ladder should be used to record the images between [A] and [1] since the wall leans backward at an angle from the camera. The camera could then be tilted forward at an angle equal to the wall's leaning tilt so that the image taken is exactly perpendicular to the wall's surface. Even with all these shortcomings, however, the final result of the mosaic is much more accurate than any single camera view could record. Our final image contains 31 photos.

[illegible] The focal points of the lens were not placed [illegible] apart, but a longer spacing was used to [illegible] the lens.

h. The Dedicatory Inscription (Figs. 32–46)[?]

Since the first discovery of blocks in 1913, the inscription found here was recognized as a very important text. Notwithstanding its importance or the attention focused on it by numerous scholars, the inscription has yet to be fully illustrated or understood as an element of the monument. Twenty-six fragments of the text have been published to date, although the twenty-sixth fragment is really a misreading of a previously recorded block. Nine blocks were found by Philadelpheus during the excavations of 1913 and four more were located by Rhomaios during the summer of 1922 (Fig. 32). In 1926 I. Miliades excavated the section of the retaining wall east of socket [18] and located twelve more blocks. Ten years later, the whole collection of 25 blocks was presented in an "epigraphic note" at the end of Gage's article on the Actian War memorials. These fragments are listed below according to Gage's numbering system for the convenience of reference. To minimize confusion with the system of Rhomaios and our sequential numbering of the fragments still preserved at the site, Gage's block numbers will be indicated by the prefix "G."

Table 4
The Fragments as Numbered by Gage

Fragment #		Fragment #	
G.1	R·DIV	G.14	PRO
G.2	I·V·R·I	G.15	SED
G.3	NEPTVNI	G.16	IS
G.4	XI	G.17	S
G.5	PTVM	G.18	CES
G.6	[illegible] (joins with G.7)	G.19	IT·IN·HAC (joins with G.6)
G.7	AC	G.20	ENSVL
G.8	CE·PARTA	G.21	ASTRA
	([illegible] with G.9 [illegible] G.22)	G.22	QVIBV
G.9	A·TERRA	G.23	SES (or perhaps SEQ?)
G.10	ON	G.24	RI
G.11	EGR	G.25	ESSA
G.12	NOM		
G.13	S·REGI		

A complete [illegible] arranged in chronological order, include the following [illegible] 1922 [illegible] 1927, p. [illegible] 1937, p. 118 [illegible] pp. 111–[illegible] originally illustrated [illegible] G.2 [illegible] G.11, G.13, and G.24 [illegible] shows [illegible] Figures [illegible]

[illegible] 1922. The reading [illegible] which Rhomaios showed was [illegible] and [illegible] would have recorded [illegible] had he seen Rhomaios' illus-

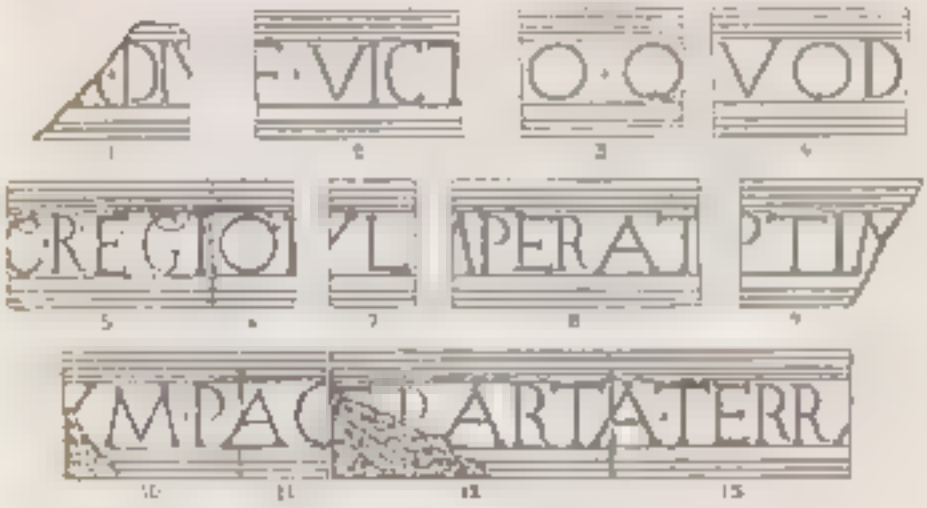

·DI
F·VICI
O·Q
VOD
·REGIO
·L
PERAI
·TIV
·M·PAC
·PARTA·TERR
1
2
3
4
5
6
7
8
9
10
11
12
13

Fig. 32

Fig. 33

In 1969, J.H. Oliver constructed a proper text from these 25 fragments. His article unfortunately was overlooked by Ehrenberg and Jones when they revised their collection of texts in 1975, and as a result many students of this period know only an inferior version of this important inscription. In 1977, Oliver's own text was altered slightly by J.M. Carter when he claimed to have found a twenty-sixth block during a visit to the site in the 1960s. Although Carter published no drawing or photograph of the new block, it is clear that he misread C.25 (currently lying upside down 7.5 m. to the south of socket [S]; see [illegible]). Since Carter listed all the blocks he saw, and C.25 is not among them, since this block currently has [illegible] that [illegible] anyone else looking for inscription [illegible] would have failed to notice it, we are certain that Carter's twenty-sixth block is really C.25 [illegible], read upside down [illegible]. Carter's restoration [illegible] has been abandoned in our restored text.

To make the list of fragments complete, three additions must be appended to Gagé's list. In 1922, [illegible] noted the existence of two [illegible] at the western end of the lower terrace which clearly came from the same [illegible]; we add them to Gagé's list as C.26 and C.27. Today, one of these blocks (which we arbitrarily designate C.27) still remains on the terrace [illegible] south of socket [illegible] (fig. [illegible]). An additional fragment, which we call C.28, was partially [illegible] in 1974 [illegible] who published a picture of it in his 1974 [illegible] report [illegible]. From the position of the column drum in the photo, fragment C.28 should be located roughly [illegible] meters south of socket [illegible]. We have [illegible], because we are unable to locate the block on the [illegible], although it probably still lies buried in the soil. From the photo, however, we can clearly make out [illegible] and the lower horizontal stroke of an E or an L. If we read the letter as an L, and restore an interpunct between the two letters, this new fragment would fit with [illegible].

Finally, [illegible] July 1987, Murray noticed traces of a [illegible] on the right side of C.37 and of the right horizontal stroke of a [illegible] on the block [illegible]. The reading of a [illegible] before the A agrees with [illegible] restoration [illegible], but the [illegible] demands a reevaluation of the inscription's concluding verb. It seems that Oliver's [illegible]

[illegible]

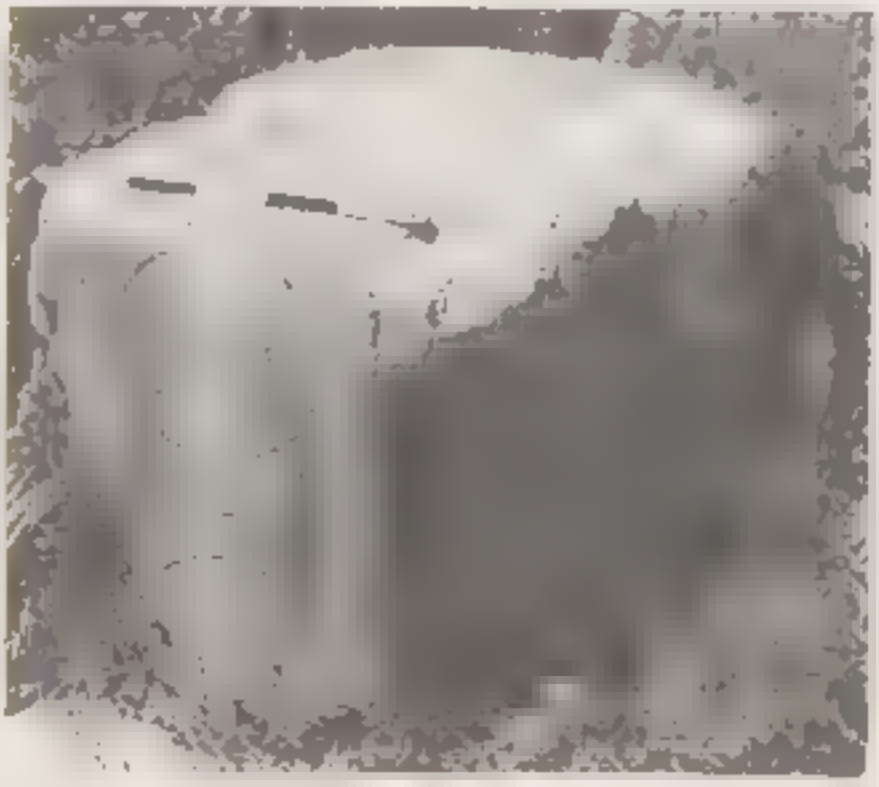


Fig. 37

Fig. 36

Fig. 38

Fig. 39

Fig. 40

Fig. 41

Fig. 42

Fig. 43

Fig. 44

Fig. 45.

Fig. 46

dicavit" must now be abandoned in favor of something like "consecravit."[1]

At this juncture it may help to review what Suetonius says about the dedication in his biography of Augustus (18.2) [illegible] locum castrorum, quibus fuerat usus, exornatum navalibus spoliis Neptuno ac Marti consecravit ("the site of the camp which he had used, adorned with naval spoils, he consecrated to Neptune and Mars"). The similarity between the words of the text and the "[spoliis] [ornata] [consacravit]" of the monument's inscription is striking. We believe that this is more than simple coincidence and think it likely that Suetonius had a copy of the dedication text from so famous a monument, or more likely, that he knew the text from the Memoirs of Augustus, which he tells us he consulted on numerous occasions.[2] For this reason, we have decided to follow the vocabulary of Suetonius' sentence and restore the inscription's concluding words as "navalibus spoliis [exornat]a c[onsacravit]."

If we accept that Suetonius was accurately informed concerning this

[1] For the spelling "consacravit," [illegible]

[2] Suetonius, in his biography of Augustus, [illegible] on five separate occasions [illegible] one of Caesar's [illegible] fragments gathered from other authors [illegible] fragments #2, #4, #5, #20. It should also be remembered that, of the ancient authors who mentioned this monument, Suetonius alone correctly attributed the camp's dedication to Neptune and Mars.

monument (he is the only author to identify correctly the deities honored there), it seems that only naval spoils were displayed at Octavian's campsite. Other than the rams, the only items displayed there for which we have any record are the statues of Eutychos and Nikon. Although it might first appear otherwise, these conform to our hypothesis because the bronze for their manufacture would have come, most likely, from one or two of the captured rams. Furthermore, Strabo's observation that the entire precinct (both on the hill and in the grove below) was adorned with spoils might lead us to speculate further. If naval spoils alone were displayed at the Campsite Memorial, then spoils taken primarily from the army would have been displayed near the athletic fields in the sacred grove at the base of the hill.

We have checked Carter's statement that C23 cannot read SIS, because the last letter must be an O (or a Q). The total outside width of the letter from the upper right edge of the preserved stroke to the exterior of the curved left side measures 19 cm, while the width of the C on C2 from a point just below the flare of the serifs to the exterior of the curved left side measures 20 cm. Although the O on C13 also measures 20 cm from a point just before the serif atop the vertical stroke to the exterior of the curved left side, its top appears flat in comparison with the letter on C23. This block, therefore, could read [illegible]. We accept Carter's proposal that it reads SEQ because of its probable position in the text (see below).

As concerns the placement of the inscription on the monument, most scholars have either accepted the view of Philadelpheus that the text came from the building above the wall, or they have remained silent on the matter. Our research, however, has shown that this is simply not possible. To demonstrate why this is so, and to explore the implications of this fact for the word order of the text, we must carefully examine the inscribed fragments still remaining at the site.

Table 3 presents the dimensions and locations of the 15 blocks we identified at the site in 1986, plus the now lost fragment C25 attested only

[illegible]

in the 1974 photograph. The position of each block is noted on figure 9 and is described in relation to the sockets along the face of the wall in Table 5. Our numbers correspond to each fragment's relationship to the beginning of the inscription, i.e., they are numbered sequentially beginning at the west. For example, block #1 ([illegible]) lies [illegible] meters out from socket [5]; #10 ([illegible]) lies adjacent to the wall at socket [8]; and block #12 ([illegible]) lies between #11 and #13 in front of socket [11].

Fragment numbers preceded by an asterisk (*) are headers with the length of the inscribed surface presented in the "block length" column and the length of the header given in the "block depth" column. "Space units" are equivalent to letter widths regardless of the letter's shape or size; interpuncts have not been counted because in all but one case they seem not to occupy a full letter space. Whole letters, therefore, are counted as space units, and two partial letters are counted as one space unit. Included among our 14 fragments is one uninscribed block (our #11). Gagé's numbers are indicated with a "G-" prefix, and we have noted the numbers of the new fragments not inspected originally by Gagé by placing them in parentheses.

Table 5
Sizes and Locations of Fragments (cf. Fig. 9)

Fragment #	Space units	Text	Block length	Block depth	Position of block
1 ([illegible])	0	Uninscribed	[illegible]	[illegible]	[illegible]
2 [illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]
*3 [illegible]	2	[illegible]NQ	[illegible]	[illegible]	[illegible]
4 [illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]
5 [illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]
6 [illegible]	1	[illegible]	[illegible]	[illegible]	Adj. to #[illegible]
7 [illegible]	[illegible]	[illegible]REG[illegible]	[illegible]	[illegible]	[illegible]
8 [illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]
9 [illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]
10 [illegible]	4	[illegible]	[illegible]	[illegible]	Adj. to #[illegible]
11 ([illegible])		[illegible]	[illegible]	[illegible]	[illegible]
12 [illegible]	4	[illegible]	[illegible]	[illegible]	[11]
*13 [illegible]	2	[illegible]	[illegible]	[illegible]	Adj. to #[illegible]
14 [illegible]	3	[illegible]	[illegible]	[illegible]	Adj. to #[illegible]

Total letter spaces: [illegible]
Total inscribed length: [illegible] m

The fact that two of these blocks ([illegible] and [illegible]) are inscribed headers demands that the inscription be placed on the wall over the sockets. It would be impossible to fit a deep block like [illegible] into an architrave

corresponding to the column elements found at the site.[1] This evidence is conclusive, and it is supported by the varying widths and irregular back sides of the inscribed blocks themselves (cf. Fig. 35). Most of these blocks were clearly intended to be set directly into the hillside and therefore little attention was paid to finishing their back faces. As a result, their thicknesses vary widely (cf. "Block depth" values, Table 5). Of the blocks currently visible, only 4.21 is cut down to a uniform thickness and this is simply because it was clamped to a backer serving as a connection to the concrete core of the podium.

The original length of the text can be roughly calculated from the lengths of blocks #2–#13. Since 43 letters of different widths randomly preserved from the entire length of the original dedication (see infra) occupy a space of 10.4 m., the total restored text of 220 letters (see infra) should occupy a space of approximately 50 m. This is clearly too long to fit easily on a stoa whose preserved stylobate measures 40.1 m., but quite appropriate for placement along the southern face of the podium whose length is 62 m. If the dedication was centered over the rams, we should restore a vacat of approximately 3.9 m. before and after the inscribed text. Such a blank space explains the two uninscribed frieze blocks noted by Rhomaios in 1922, one of which we record as block #1 (4.27) on the western end of the terrace. It might be more than coincidence that a vacat, about 3.9 m. long, locates the inscription's first word over the center of socket [1].

The fact that the inscription was originally placed above the rams on the retaining wall has important implications for the word order of the proposed restoration. Although we cannot prove this conclusively, it seems unlikely that the larger blocks have strayed far from their original positions on the monument.[2] For example, the positions of blocks #9 and #10 next to the base of the wall imply that they have simply dropped from their original locations on the wall above. If this is true, then other individual blocks (and particularly the larger, heavy ones) may be close to their original positions in the inscribed text on the wall. The physical locations of the blocks currently at the site, therefore, might be significant in determining their original positions in the restored text (cf. Table 5 and Fig. 39).

---

1. If the text is placed over the rams, we also need not be concerned, as is [illegible] 1977, pp. 227–28 and n. 3, with matching the proportions of the inscribed frieze to the column elements found at the site [illegible]. [illegible] the dense [illegible] of the site [illegible] at the southeast corner of the podium [illegible]. Since Octavian's monument [illegible] in the vicinity [illegible] have confused the ruins of the [illegible] with a separate structure and assigned the nearby [illegible] (Dio [illegible] 27.5).

2. To our knowledge, none of the 17 blocks currently visible at the site was moved significantly by the excavators from the positions in which they were originally found.

Table 6:
Blocks Reported by Rhomaios in 1922

(Rhomaios' numbers are preceded by an "R," ours by a "G.")

R1	G1	R·PVB	R8	[illegible]	MPERAT
R2	G2	E VICT	R9	[illegible]	SVM
R3	G11	QVO	R10	[illegible]	VMEPA (A joins with R11)
R4	G12	VOM	R11	[illegible]	N
R5	G15	C·REGI	R12	[illegible]	E·PARTA (A joins with R13)
R6	G14	ON	R13	[illegible]	A TERRA
R7	G4	VL			

To his credit, Rhomaios realized the importance of this fact in the early 1920s and in his publication of the fragments gave the general locations of the blocks then known to him. According to his report, the blocks were arranged as follows: R1 and R2 (see Table 6) lay about 10 meters from the western end of the wall. Blocks R3–R13 lay about 25–28 meters from the western end, and the rest lay in between. We cannot be sure of the precise sequence of individual blocks, since he may have rearranged them slightly to make sense of the inscription. Nevertheless, some general observations can be made on the basis of this evidence.

A comparison of Tables 6 and 5 shows that, of Rhomaios' 13 blocks, only R2 (G2), R3 (G11), R5 (G15) and R10 (G6) remain visible at the site today. From our measurements, however, we are certain that R2 and R10 have not been moved appreciably since 1922, nor apparently have the other two. Of the additional blocks discovered since 1922, G23 and G20 are the most important, since they were unknown to Rhomaios and were presumably still buried when he wrote that "it would be logical to expect from a consideration of symmetry, that almost one-half of the full inscription should be sought in the future to the right [i.e., to the east] of block #13." Undisturbed until the section east of socket [18] was excavated by Mitsakis in 1926, they were found buried next to the wall, close to where they fell when dislodged from their original positions in the text. For this reason, we have followed Carter's reading of G23 as SI[?] and placed it in the text roughly where it can be seen today close to socket [?]. With this in mind, we present the following restoration as the most likely version of the monument's dedication. Our block numbers appear above the appropriate places in the text. Rhomaios' numbers are preceded by an "R."

Rhomaios 1925, p. 2.
Rhomaios 1925, p. 5.

4.3 The Dedication Text from Octavian's Campsite Memorial
(for a translation, see infra Section 5)

#1 R1 #2 R2

Caesar Imp Caesa[r Div[i Iuli f] vict[oriam consecutus

#3 R3 R4 #11 #4 #5 #7 R5

bell[o quod pro [r[e] [p[u]blic[a] ges[s]it in hac

R6 R7 R8 R9 #8 R10 R11 R12

region[e consul [quintum imperat]or se[ptimum pace [ ] parta

R13 #10 #13 #12 #9

terra [marique Nep[tuno] et Ma[rt]i c[astra [ex [quibu[s

#14

ad hostem in seq[uendum egr]ess[u]s est navalibus spoli[s

#6

[consa]cravit [illegible]

[illegible]

Note that the relative positions of the blocks currently at the site have been followed as closely as possible in constituting the word order. The fragments that depart significantly from this rule, #13 and #6, are small enough to have strayed far from their original positions. We obviously do not maintain that all the blocks at the site are in their original positions after falling from the wall; certainly they are not. Some have obviously been dragged away, in some cases for reuse elsewhere. We found a few large blocks from the retaining wall up to 40 meters downhill from the site, clearly abandoned because it was too difficult to drag them farther. Fragment #6 is a relatively small one which could have been easily moved from its original position when other blocks were removed from the site. The exact site of fragment #13 is not yet known. Our blocks #9, #10, #12 and #13 may also seem to have been moved, but their close proximity in the original text makes their current jumbled state insignificant. If our argument is accepted that the current positions of these blocks correspond roughly to their placement in the original text,

[illegible]

[illegible]

then the order of the major grammatical units that make up the dedication can certainly be recovered.

The placement of Caesar's name as donor in the nominative case at the beginning of the dedication would thus be warranted by the locations of R1 and our block #2 (= R2) at the west end of the wall. The names of the deities to whom the monument was dedicated, in the dative, then occur in the middle of the inscription near the place where the blocks can be found today, wrenched from their original positions in the gap between sockets [18] and [A]. And finally, the verb "consacravit" will conclude the text near the eastern end of the wall.[57]

The form of the dedication, essentially nothing more than a long sentence, corresponds closely in structural arrangement to the inscription placed by Augustus in Rome on the bases of two obelisks dedicated to the god Sol in 10/9 B.C. ([illegible] = CIL VI 701 and 702):

Imp. Caesar divi f.
Augustus
pontifex maximus
imp. XII, cos. XI, trib. pot. XIV,
5 Aegupto in potestatem
populi Romani redacta
Soli donum dedit

Both texts begin with Caesar's name, followed by the date of the dedication expressed in the titles of the ruler. An extra subordinate clause precedes Octavian's titles in the Nikopolis text to stress the fact that time has passed since the date of the Actian War: "victoriam consecutus bello quod pro re publica gessi in hac regione."[58] Following the titles, an ablative absolute occurs in both texts to describe the circumstances which have brought about the dedication, and finally there follows the name of the deity (or deities) to whom each monument is dedicated. Future excavation of the section beyond socket [1] may produce additional fragments which will slightly modify the text; otherwise, we are fairly certain that the general form, word order and position of the dedication on the monument have finally been settled.

4. The Stoa

Although the existence of a stoa or portico atop the podium was documented in 1974 by four separate photographs, a full account pre-

[57] Given the placement of our blocks #6 and #[illegible] it seems possible that additional fragments of this inscription will turn up when the area east of socket [1] is finally excavated.

[58] [illegible] 1977, p. 230, argues that these titles were designed for the end of the inscription to stress the fact that the monument postdates the victory by almost two years. We believe that the subordinate clause "victoriam consecutus [illegible]" following [illegible] adequately alerts the reader to this fact. [illegible] 1977, p. [illegible], prefers the spelling "quinctum" on the evidence of the [illegible] 1976, p. 57, #1? erected by the Senate. Augustus uses the normal spelling "quintum" in the Res Gestae 6.1, 8.1, 15.1, [illegible] and 21.3. Since Octavian presumably composed the text of the Campsite Memorial, we feel that "quintum" is to be preferred over "quinctum."

senting all the details of the discovery never appeared in print. One hopes that someday the excavation of the site will be resumed and that a proper account of its original design and subsequent history will be prepared. What follows does not presume to fill this need; it is simply an attempt to describe the fragments of the building that have come to light over the years and to make some simple observations concerning the building's original form. In general, the pieces discussed below are currently visible at the site or reside in the courtyard and storerooms of the museum at Nikopolis.

Among the elements still at the site are two limestone column drums, one of which (Fig. 47) still bears traces of its original stuccoed surface. This drum lies 7.2 m. out from [A] and exhibits clear traces of fluting. The other (Fig. 48), 4.5 m. out from [B], has no flutes and a diameter of 0.5[?] m.; the columns may have been fluted only part-way down their shafts, like those in the Stoa of Attalos in Athens.[6] Also at the site, currently lying near the southeast corner of the podium, is a column base (Fig. 9 at "Z"; Fig. 49) which corresponds in diameter to the two drums. The setting surface that would have roughly corresponded to the column's lower diameter measures 0.575 m., and the dimensions of its square plinth are approximately 0.79 m. on a side.

The single Corinthian capital found at the site in 1913 (Fig. 4) was moved to the Nikopolis museum with a second column base in 1967 and now sits atop this base outside the museum's northwest corner. The capital's lower diameter was impossible to measure directly in its present position, but a rough measurement of its circumference (ca. 1.60 m.) corresponds well with the diameters of the base and the column drums at the site.[7] The capital's preserved height (including the abacus) is 0.35 m. It is interesting that neither the capital's proportions nor its decoration are Augustan and seem to be much later in date than the monument's original construction.[8] Although this matter remains for further analysis, we propose that this capital (and the column elements?) belongs to a later phase of the stoa.[9]

6 In 1986 this drum was located out from socket [8], but in 1987 the same drum had been rolled down a [illegible] and now lies as described in the text. Figure 9 represents the position of the column as it appeared in 1986.

7 Because the capital is not complete, it was difficult to get a precise measurement of its circumference. A measurement of 1.60 m. would equal a diameter of 0.509 m., and this corresponds well with Vitruvius' prescription for the capital's diameter when the lower diameter of the column equals [illegible] m. This value is calculated from the Augustan foot revealed by the intercolumnar spacing of the columns; see text below. Philadelpheus recorded the diameter of the capital as ca. 0.75 m., but he must be referring to the width of the abacus.

8 For examples of Augustan capitals from Greece, see Heilmeyer 1970, pp. 55–56, with the appropriate plates; for examples of Augustan capitals at Nikopolis, see [illegible] 1987, p. 13 with Pls. 12 and 13 on pp. 455–56.

9 This capital's late appearance must lie behind Rhomaios' belief (see above, 1925, p. 3) that the [illegible] elements found at the site came from some later structure built at the site. We must stress, however, that the [illegible] atop the podium reveals it as an integral part of the monument and presumably part of the monument's original plan. We must also point out that the suggestion of [illegible] 1975, pp. 56–58, that a

Fig. 47

Fig. 48

Fig. 50

In addition to these elements from the columns, we found a few fragments from the building's roof in 1986, namely, large Corinthian tile fragments (from both pan and cover tiles) as well as fragments of smaller Laconian tiles. In 1987, on the road southeast of [D], we also found a fragment of a terracotta water spout modeled in the shape of a lion's head (fig. 50). This fragment, measuring 0.087 m in height and 0.06 m from the back of the lion's mane to the tip of its nose, preserves the eye and left side of the beast's head down to its open mouth. No traces of teeth are visible.

We also found a few fragments from the building's marble decoration: two white moldings (fig. 51), and a small fragment of a thin (0.021 m) white revetment slab flecked with gray spots. A bit of sculpture has even turned up at the site. H. Tucker reported finding at the eastern end of the podium in 1979 a "carefully chiseled fragment of marble sculpture" 0.077 m in height. According to Tucker, the piece came from the dress

[illegible] unsupported by the foundation [illegible]

[illegible] large, gray and rising [illegible] throughout the [illegible] and one large [illegible] m. This fragment [illegible] the two marble moldings mentioned below, [illegible] deposited in the Nikopolis museum.

Fig. 50

Fig. 51

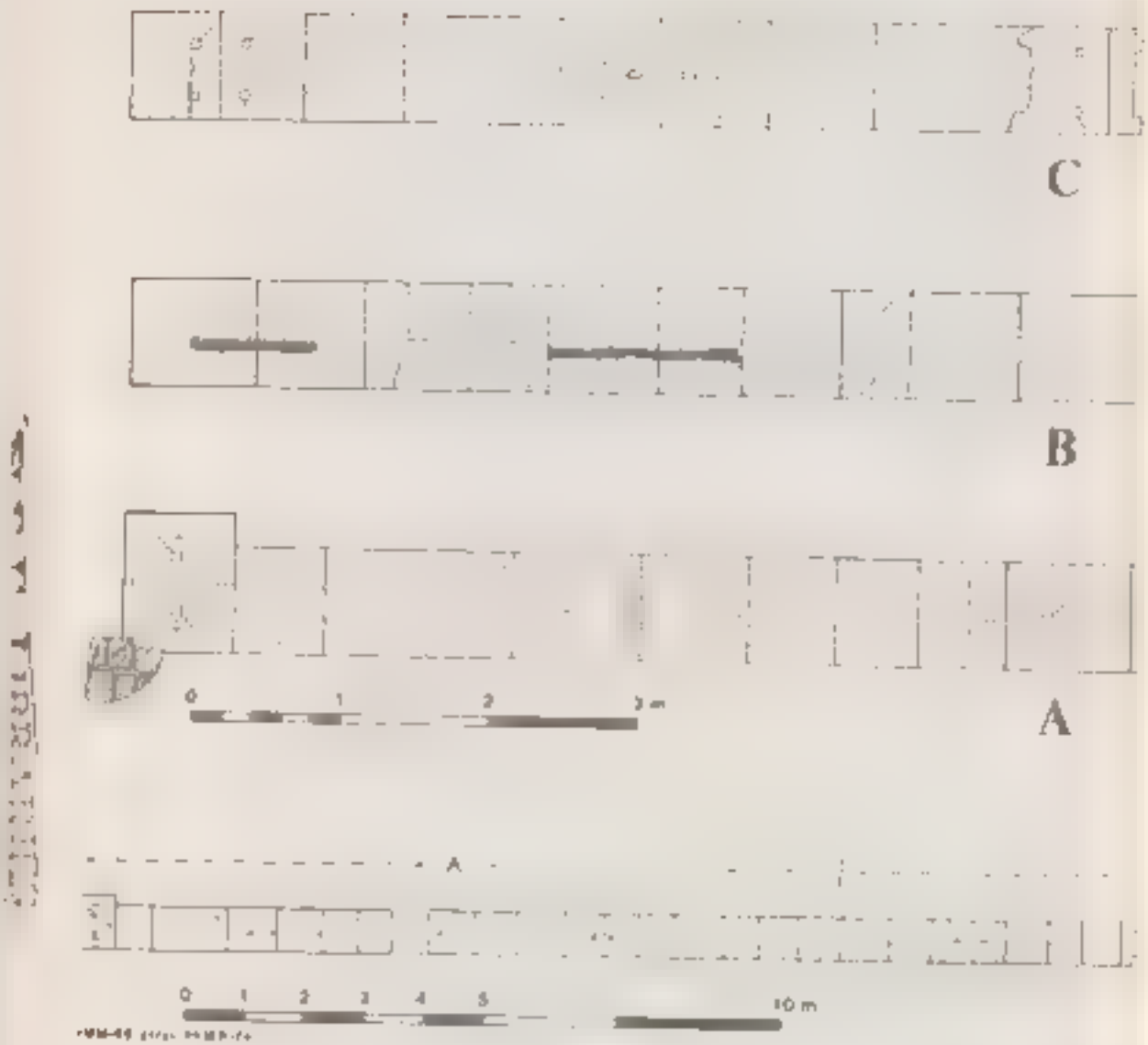


Fig. 52.

Fig. 52

of a life-sized female statue. The fragment's present location is not stated.[84]

As for the foundations uncovered in 1974, a plan of the exposed blocks was hurriedly prepared, but for various reasons was not included in the preliminary report. We now include this plan as Figure 52, and comment simply that it represents a "restored view" of what must be the inner (south) side of the stoa's northern section. A comparison with the photographs of the north foundation reveals that the plan does not represent the actual present-day condition of the excavated blocks. As preserved, the foundation measures 40.1 m. from east to west. The beginnings of the southward running foundations at both its eastern and western ends (Figs. 6–7) are clearly preserved.[85] These returns indicate that the original groundplan must have resembled the Greek letter Π with its open end facing southwestward toward the site of the naval battle. The stoa would have essentially wrapped around the sacred site of Octavian's tent.

Without further excavation and careful measurement of the exposed remains, it would be unwise to conclude much about the details of this structure. Nevertheless, the 1974 plan plus the fragments preserved at the site allow for some general observations. The large cornices, column elements (two bases, one capital and two drums) and waterspout justify the restoration of a simple roofed portico atop the terrace behind the rostra display. Dowel cuttings and setting marks on the foundation's upper surface reveal the placement of 15 square plinths set roughly 2.81 m. apart (center to center). This spacing corresponds to an interaxial distance of 9.5 Augustan feet, allowing us to compute the Augustan foot utilized in this building as 29.578 cm.[86] It also allows for the following proportional suppositions about the building's columns and their spacings in Augustan feet:

a) lower diameter (l.d.) of column = 2 Augustan feet (estimated from the diameter of the setting surface on the column base 0.575 m.)
b) interaxial spacing = 9.5 Augustan feet
c) intercolumnar spacing = 7.5 Augustan feet
d) column height (base, shaft and capital) = 10 × l.d. = 20 Augustan feet (i.e. roughly 5.9 m.)

From these values, it would seem that the building's architrave and roof

[84] Lange 1962, p. 98 and [illegible].

[85] Clear evidence for a return exists at the western end of the foundation but we do not know how far to the south this line of blocks originally ran. A hint of the eastern return is indicated by the greater width of the easternmost foundation block of the exposed stylobate.

[86] The interaxial distance between columns 5 and 6 measures roughly 3.19 m. on the plan. It is not clear whether this increased spacing was original to the plan or simply the result of a later movement or a mistake in the plan's construction. From the displaced condition of the blocks, we can say that the latter is a distinct possibility. It must be stressed that we did not clean or remeasure the exposed blocks of the stylobate. A full study of the campsite still remains for the future.

were constructed in wood and explain why fragments of stone architrave blocks have never been found at the site along with the column elements.

Additional cuttings in the stylobate's upper surface attest to the erection (whether originally or later, we cannot say) of dedications and stelai (cf. Figs. 80 and 52). The absence of a step, the fact that the columns are set at ground level, and the clear wooden clamp cutting that mars the surface of at least one block (a sign that the block was reused) indicate that the stylobate was probably not intended to be seen.[illegible] It may have been covered originally with a thin layer of earth or clay, appropriate for the simple site of a Roman general's tent. For this reason, we envision the center of the open-air enclosure as a simple paved area which would have indicated the site of Octavian's tent. Here too may have stood altars and/or statues of Neptune and Mars.[illegible]

Additional fragments of marble at the site reveal that the stoa (or its contents) was decorated with marble moldings (such as the dado molding illustrated in Fig. 51) and with some surfaces clad in a thin (0.01 m.) veneer of white marble flecked with gray spots. Laconian rooftiles found at the site may indicate that the stoa was repaired at a later date when the original heavy Corinthian tiles were replaced, and perhaps, when at least one capital was replaced as well.[illegible] On the other hand, the Laconian tiles may indicate the presence of one or more additional roofed structures on the terrace. For example, remains of what appear to be a basin plastered with hydraulic cement (Fig. 9 at [illegible]) may correspond to a cistern. Regardless of all the precise details, there can be little doubt that the U-shaped stoa with its central open-air courtyard represents the *hedos ti . . . hupaithron* mentioned by Dio 51.1.3.[illegible]

5. *A Reconstruction of the Campsite Memorial*

The finished monument must have been impressive. As one approached from the grove at the base of the hill, a massive podium fronted by a lower terrace some five to six meters wide first came into view. Resting on this lower terrace, with their back ends fixed to the podium's long retaining wall, was a continuous line of green warship rams. Arranged in generally increasing sizes from right to left, these weapons led one's attention smoothly to the west end of the wall where the inscription

[illegible] The swallow-tailed cutting appears on the third block from the eastern end of the stylobate (the right block in the upper photo in Figure [illegible]). This same type of cutting has been noted in many of the fortifications of Epirus, [illegible] and [illegible], where they definitely served to hold wooden clamps. For the evidence in [illegible] see [illegible], p. [illegible].

[illegible] We thank F. E. Schwandner for this suggestion, as well as for observations on the stoa's proportions.

[illegible] A mass of tiles and cement at the eastern end of the preserved stylobate indicates that some repairs were undertaken at the site at a later date. Since both types of rooftiles were found at the site, we presume that the more substantial tiles would have been utilized in the initial construction phase of the [illegible].

[illegible] Cf. supra n. 7.

began above the first ram—a monster weighing over two tons.[illegible] Like those who see a modern aircraft carrier for the first time at close range, most visitors would have been unprepared for the massiveness of these weapons. And if the amazing sight had left the visitor forgetful of the important facts, the inscription clearly paraded them in foot-high letters across the entire length of the wall: IMPERATOR CAESAR, SON OF THE DIVINE JULIUS, FOLLOWING THE VICTORY IN THE WAR WHICH HE WAGED ON BEHALF OF THE REPUBLIC IN THIS REGION, WHEN HE WAS CONSUL FOR THE FIFTH TIME AND COMMANDER-IN-CHIEF FOR THE SEVENTH TIME, AFTER PEACE HAD BEEN SECURED ON LAND AND SEA, CONSECRATED TO NEPTUNE AND MARS THE CAMP FROM WHICH HE SET FORTH TO ATTACK THE ENEMY NOW ORNAMENTED WITH NAVAL SPOILS.

Atop the terrace sat a Π-shaped stoa more than 40 meters wide. Its placement on a lofty terrace reminded one of the upper terrace at the Asklepieion on Kos, or of two Italian sanctuaries thought to be influenced by the Koan complex: the sanctuary of Fortuna Primigenia at Praeneste (particularly the Cortina Terrace) and the sanctuary of Hercules Victor at Tivoli.[illegible] Though less elaborate in execution than these plans, the intended effect of Octavian's Campsite Memorial was no less grand. Here, "under the open sky" on a wide terrace supported by a Roman rostra of grandiose proportions was a portico which focused the visitor's attention on two images. The first was near at hand: the simple consecrated place where Octavian's tent had stood. The second was in the distance, where one could see on the horizon the site of the glorious Battle of Actium, and in the middle ground hummed the living city which celebrated the great victory (fig. 53).

In order to help the reader visualize the original appearance of the monument and its south facade, we give two restored views—one from the southeast (fig. 54), the other from a point near the present-day gap between sockets [15] and [A] (fig. 55). Our reconstruction is not intended to be accurate in every detail because, quite frankly, too much remains unknown. We do not know the original height of the wall, nor the exact course at which the inscribed frieze was set, nor the precise disposition of the wall's upper courses. We also know little about the overall dimensions of the portico's east and west wings atop the upper terrace.

[illegible] This estimate of the ram's gross weight was provided by John Coates of the Trireme Trust in a personal communication to W. M. Murray dated December 16, 1986. For a discussion of the sizes of the rams mounted [illegible] chapter 3[illegible].

[illegible] For restored views of the Asklepieion at Kos, the sanctuary of Fortuna Primigenia at Praeneste (Palestrina), and the temple of Hercules Victor at Tivoli, see respectively [illegible].

[illegible] (1988, pp. [illegible]) [illegible] the suggestion that Octavian took the auspices before the battle from this spot [illegible]. This spot was not only the site of Octavian's tent but also a command post from which he could survey his entire army; its height made it the best place in the area for observing the flight of birds and other heavenly signs.

Fig. 3.1

In addition, we know nothing about the entrance to the complex nor do we know the precise shapes of the rams although we thought it reasonable to model them after the example from Athlit. Everywhere we have attempted to follow the factual which we are certain and a conjectural view is better than a review at all.

With Octavian's Campsite Memorial thus defined, let us turn once again to the problems posed by the ancient accounts (supra Section I). A simple comparison of these statements with the physical remains leads us to conclude tentatively that the monument was dedicated to Neptune and Mars as recorded by Suetonius (*Aug.* 18.2). If Apollo was included in the dedication no evidence has yet been found to substantiate this fact. We recognize that there are obvious strong connections between Octavian, Apollo, Neptune, Mars and Actium that would make it appropriate for Apollo to be included among the deities honored here. Indeed, the site is still known locally as "The Temple of Apollo." Nevertheless, we believe that Suetonius' description of the monument displays a knowledge of the dedication text. And therefore we consider his testimony preferable to that of Dio (51.1.3), who not only says that the site was sacred to Apollo, but omits mention of Neptune and Mars altogether. Since Apollo is extensively represented elsewhere in the neighborhood, it is possible that Dio simply made a mistake. Strabo's account (7.7.6), which implies that the whole complex on this suburb was sacred to Apollo, can also be interpreted in a manner that is perfectly compatible with Suetonius' text. As Strabo tells us, the hill on which

[illegible] well-established fact that Apollo [illegible] Augustus' victory [illegible] that he identified quite [illegible] Dio and Strabo [illegible] example [illegible]

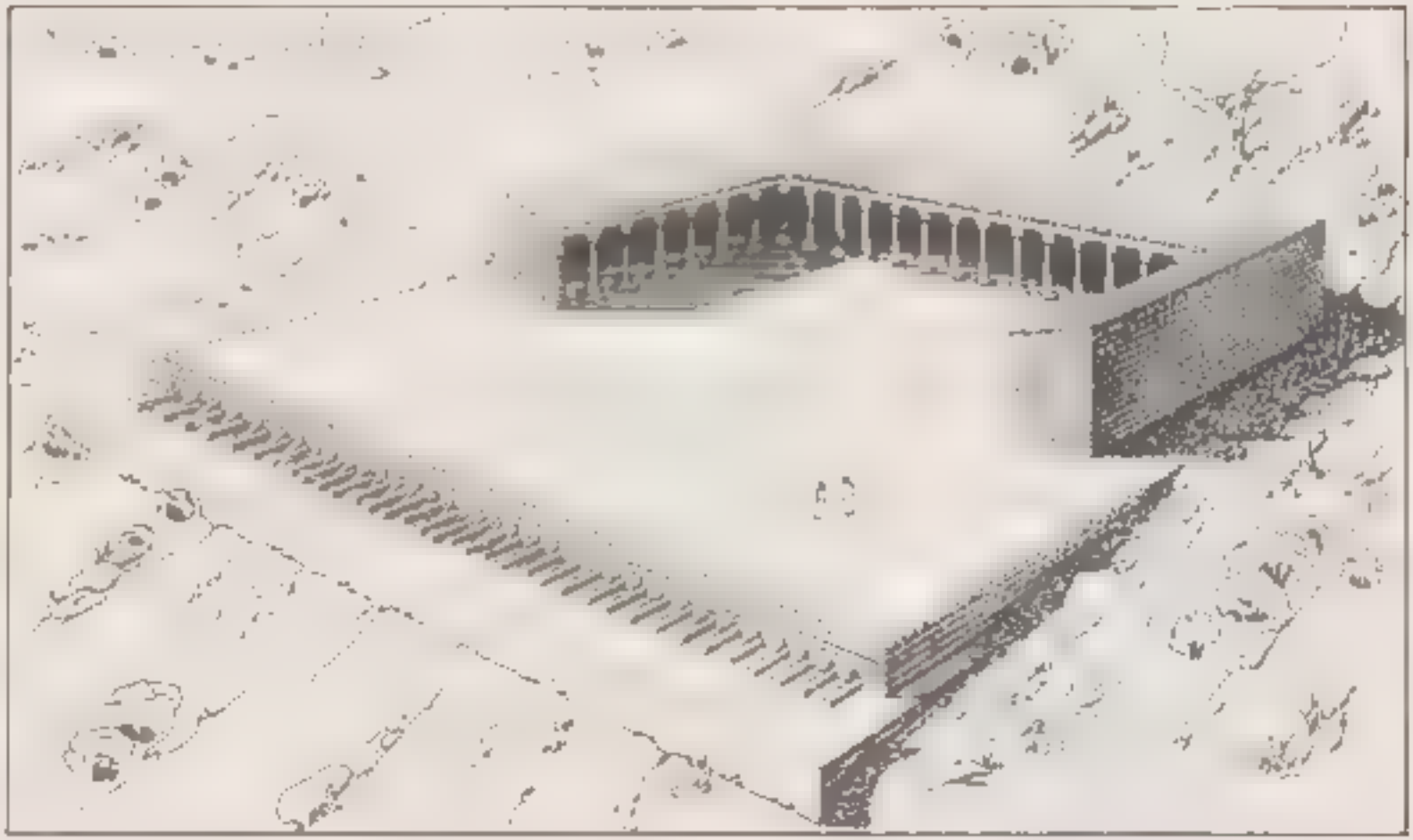


Fig. 54.

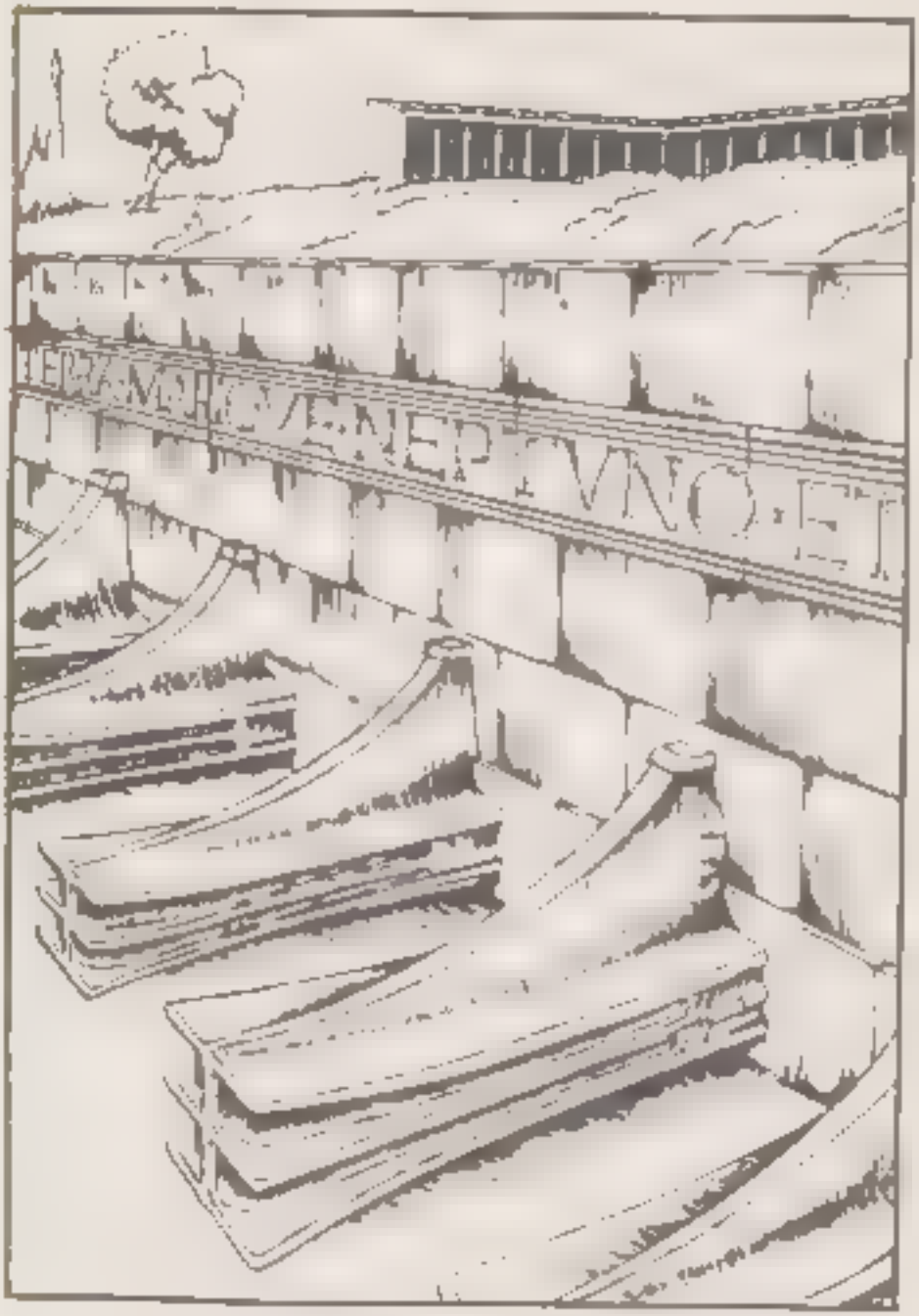


FIG. 55

the monument was built, and which lay behind the *temenos* of the *Aktia*, was itself sacred to Apollo. On this hill, a *temenos* was specifically set aside by Octavian at the former site of his camp, decorated with naval trophies, and dedicated to Neptune and Mars.

What little we know about these three deities of the Actian War makes it quite appropriate for a *temenos* of Neptune and Mars to be built in an area otherwise sacred to Apollo. Gagé has examined the relationship between these deities and Octavian, and has pointed out an interesting connection which emerged after the Battle of Actium—a connection that he feels was personally forged by Octavian. The evidence is provided by the *Fasti Arvalium* which report that on the birthday of Augustus (September 23) cults of Mars and Neptune were received in the Campus Martius, and of Apollo "ad theatrum Marcelli" (i.e., at Apollo's ancient extrapomerial temple near the triumphal gate). Although the texts fail to list the connection between these anniversaries, Gagé shows that their falling on the same day as the *natalis Caesaris* is more than mere coincidence. He concludes that these festival days were instituted on Octavian's birthday in commemoration of the victory at Actium: "The gods of 23 September are the gods of Actium." [illegible]

In trying to show that the Campsite Memorial was sacred to all three deities, Gagé formulates a convincing argument that applies equally well to our modified view. We believe that a *temenos* of Neptune and Mars was particularly appropriate on a hill sacred to Apollo, and that the whole sacred area (hill and *temenos*) overlooked a suburb of the city which hosted the games of Actian Apollo. As the center of the Actian Games, this suburb of the city must have evoked strong images of Apollo, and for this reason Dio has mistakenly assumed that the Campsite Memorial was sacred to Apollo as well. Since Neptune is clearly mentioned in the inscription (Mars is as well, but the reading is less certain) it seems unnecessary to defend Dio's contradictory account. He simply made a mistake. Otherwise, Dio's description of the site as an "open-air shrine" (*hedos ti ... hypaithron*) makes sense if we view the centrally placed site of Octavian's tent as the consecrated focal point of the *temenos*. In all other respects, when one restores the monument as we have described it, the ancient accounts really supplement one another.

What then of the alternate views recently expressed concerning the monument's form? We have already referred to Oikonomidou's argument, based on coin types, that a temple was constructed at Octavian's campsite during the reign of Septimius Severus. [illegible] We have shown that the foundation uncovered in 1974 corresponds to a Π-shaped stoa with 15 columns along the inner side of the northern wing. What is more, the column drums, bases and capital (even though it is later found at

[illegible] 1936, pp. [illegible]; see also [illegible] p. [illegible]; also [illegible] 1955, p. 512.

[illegible] 1975, pp. [illegible]. Her views have been recently reiterated by [illegible] 1987, pp. 1[illegible].

the site correspond perfectly with this stoa and not with some temple. The coins of Severan date which depict a large temple of the Corinthian order must, therefore, refer to some other building at Nikopolis.

Equally impossible is Picard's view that the Campsite Memorial is similar to the monument depicted on the coin minted by Antistius Vetus but with statues arrayed in a composition akin to that of the St. Bertrand trophy.[illegible] A similar verdict must be made concerning Tucker's recent identification of the Campsite Memorial with the image on Vetus' coin.[illegible] Considering what we now know about the Campsite Memorial, the coin's reverse must depict some other monument. First, were a monumental statue of Apollo (or a statue group) originally placed above the wall, it is inconceivable that its existence would have been left unmentioned by Plutarch, Strabo or particularly Suetonius. The general correlation between Suetonius' description of the site and the surviving remains implies, at the very least, that he was working from accurate information.[illegible] It would be doubly hard to explain how he could have overlooked a statue of Apollo or a statue group had it been the central feature of the monument. Furthermore, all the physical evidence gathered from the site itself points to the existence of a portico atop the podium, and not a large statue of Apollo (or of others) set in the open air.

Second, a comparison of the sockets' shapes with the frontally viewed projections beneath the statue of Antistius' coins reveals that we are not dealing with rams of the type mounted on the Campsite Memorial (if we are dealing with rams at all). The projections on the coins have a clear outward flare at their tops, while the sockets on the monument clearly flare outward at their bottoms. And finally, no sockets for anchors are preserved anywhere along the face of the podium's retaining wall. The main point of Tucker's thesis, that the statue of Apollo Aktios on the coin is separate and distinct from the statue of Apollo Palatinus, remains unaffected by our conclusions. The statue and base depicted on these coins, however, cannot be located at the Campsite Memorial. This image also seems inappropriate to us as a representation, even on an abbreviated scale, of the type of monument preserved at Octavian's campsite.

As concerns the stoa's function, it is quite possible that naval spoils from the battle were displayed here. The naval spoils that Suetonius says adorned the sacred enclosure (*Aug.* 18.2) might simply be the rams which studded the podium's south face, but they might also include other items separately placed inside the stoa atop the terrace. The act of dedicating military equipment in stoas was a common practice among

---

[illegible] Picard 1957, pp. 260–62.

[illegible] Tucker 1982.

[illegible] This is essentially the observation of [illegible] 1988, p. 52[illegible] and [illegible] 1986, p. 85.

[illegible] It must be remembered that he [illegible] correctly identified Neptune and Mars as deities honored here.

the Greeks, who filled their porticos with all types of military armor and naval gear. As concerns naval dedications in stoas, the most famous example is the one constructed by the Athenians at Delphi during the fifth century. The inscription preserved along its stylobate reads: "The Athenians dedicate the stoa and the *hopla* and *akroteria* having taken them from the enemy." Although one is unsure whether *hopla* means the cables from the great bridges of Xerxes, or simply "arms," *akroteria* must refer to ships' figureheads or perhaps their stern ornaments. Another example is known at the sanctuary of the Great Gods at Samothrace, where inscriptions reveal that anchors were dedicated in the stoa.

In general throughout the Greek world, stoas (as well as temples) were a customary repository for armor of all kinds. At Athens, shields taken from the Lakedaimonians at Sphakteria in 425 B.C. and from the Sikyonians at some unknown date were displayed in the Stoa Poikile. At Thebes, the armor taken from the Athenians near Delion in 424 B.C. was nailed to the stoas in the marketplace. At Thermon, Philip V found some 15,000 suits of armor displayed in the stoas when he sacked the sanctuary in 219 B.C. And at Samothrace, K. Lehmann discovered pieces of armor and a fragment of a spear in the stoa he called the "Hall of Votive Gifts."

Although the evidence for Roman dedications of armor in stoas is not as extensive as that for the Greeks, they too seem to have made such dedications on occasion in their porticos. Customarily, Roman soldiers displayed the spoils they won in single combat in the vestibules of their homes. Victorious generals, however, were allowed to make a special dedication of the arms taken from the enemy leader in single combat. Three grades of dedication are known. Those of the first rank, the *spolia opima*, were dedicated to Jupiter Feretrius, while those of the second and third rank were dedicated to Mars and Quirinus respectively. Dedications of military spoils were also made in public places such as the *Forum Romanum*. Livy relates (10.46.7–8) that so many spoils were captured from the Samnites by L. Papirius in 293 B.C. that he was able to decorate the temple of Quirinus and the *Forum Romanum*, and still

For Greek dedications of military equipment, see [illegible] 1979, pp. 240–95; cf. also [illegible]

See [illegible] pp. 35–54.

[illegible] p. 283.

[illegible] 1979, p. 287.

[illegible] the Pikes dedication appeared in the excavations of the Athenian Agora [illegible] 1937. Because a [illegible] has a hole in it [illegible] 1972, pp. 92–[illegible], have suggested that the shields were hung from the columns.

Diod. 12.70.5.

Polyb. [illegible]

Lehmann 1962, p. [illegible] and #158, #159 on p. 360.

Cf. Livy [illegible] 23.23.6, [illegible] 43.11 [illegible] Pliny *HN* [illegible]; in general on the origins of the Roman [illegible], see [illegible] 1967, pp. [illegible]–48.

[illegible] see [illegible] 1951, p. 1441 and [illegible] 1929.

distribute the remainder to the allies and neighboring colonies for the decoration of their own temples and public squares. He also writes (22.57.10) that after Cannae in 216 B.C. the spoils from former wars were removed from temples and porticos in order to equip the makeshift army being raised to resist Hannibal.[2]

Octavian himself is known to have made such a dedication in Rome. In 33 B.C. he commemorated his Dalmatian victory of the same year by restoring the Porticus Octavia near the Theater of Pompey. According to Appian (Illyr. 28), Octavian placed inside the portico the standards (originally captured from A. Gabinius in 48/7 B.C.) just recovered from the Illyrians. Is it not logical, therefore, to expect that the stoa at Octavian's campsite was built to house the naval dedications referred to in Suetonius' account?

We know of at least two offerings which might have been placed inside the stoa: the bronze statues of Eutychos and Nikon, cast most likely from one or two of the captured warship rams. If we are correct in assuming that other naval spoils were placed inside the building, the arch at Arausio (Orange) shows us what they would have looked like (Fig. 56). There would have been figureheads, coils of line, sets of blocks and tackle, anchors, stern ornaments, gangplanks, tridents, steering oars, masts, standards and naval ensigns.[3] Renewed excavation of the podium's surface might reveal the fragmentary remains of such equipment. But until such evidence is found, questions concerning the stoa's exact contents (or, for that matter, its true function) must remain unresolved.

Whatever its precise function, this stoa must not have been as extraordinary a sight as the ram display, because the ancient authors who specifically mention the Campsite Memorial either fail to describe the building in detail (Dio and Suetonius) or ignore it completely (Plutarch and Philippus). We must conclude, therefore, that the most memorable feature of the monument was its ram display—the monstrous ships' rams that studded the southern wall of the upper terrace. These were intended to command the viewer's attention, and to shed glory on the man who managed to capture them.

In order to appreciate the massiveness of these rams, and to recapture a sense of the awe this display was intended to inspire, we need to place these rams in perspective. To this end, we must now turn our attention to the different sizes or classes of ancient warships that were used in the navies of the Hellenistic Age.

2 Appian Hann. [illegible] in 21[illegible] [illegible] the Hannibalic War [illegible]

3 It is quite possible that [illegible] array of equipment captured at Actium [illegible] representational art of the early [illegible] p. 64.

Fig. 39.

III: The Relative Sizes of Ancient Warship Bows

1. *The Problem of Ancient Ship Classes*

Ancient navies, like their modern counterparts, were composed of different sizes or classes of ships introduced at various times for various purposes. Although the names and partial descriptions of some of these classes exist in ancient written sources, no complete warship of known class has yet been located on the sea floor.[1] In the near total absence of physical evidence for the designs of these different ship classes, it has been difficult to appreciate fully the complexity of these war machines and the differences that accounted for the various classes. The class about which we know the most, the "three," or *trieres* (usually translated as "trireme," from the Latin *triremis*), is one of the most popular and long-lived classes utilized in the ancient navies of the Mediterranean powers.

According to Thucydides, the trireme was developed at Corinth in the late eighth century B.C.,[2] and Zosimus makes it clear that the class was still in use a thousand years later. From literary, epigraphical, archaeological and iconographic evidence, a reasonably clear picture of the vessel has emerged over the years, which is now expressed in a full-

[1] Partial remains of two [illegible] interpreted as Punic warships [illegible] excavated by H. Frost between 1971 and 1974 [illegible] Marsala [illegible]. One ship [illegible] a prow structure of two up-curving [illegible] and a section of its port side up to the [illegible] (Frost 1972, 1974, 1975a, 1975b, 1981a, and 1981b). [illegible] a fast, light galley of the Hellenistic Age [illegible]. Its preserved length of [illegible] meters [illegible] supposedly larger than [illegible]. Furthermore the Punic ship's supposed weight of [illegible] the *Olympias* which according to [illegible] (personal communication, August [illegible]). A partial section of [illegible] warship's bow [illegible] with its bronze ram near Athlit, Israel in 1980 [illegible]. Here, the bow timbers were preserved along with [illegible] m of the vessel's port wale. J. R. Steffy has completed [illegible] analysis of these timbers which will soon appear in a [illegible] he is editing with L. Casson entitled *The Athlit Ram* (forthcoming, Texas A&M Press [illegible]).

[2] Thuc. 1.13.2–3 and Zosimus 2.22 [illegible] 24.1 [illegible] argues that Thucydides says only that the first Greek trireme was built at Corinth; according to Basch, the class first appeared in Phoenicia. Against this view [illegible] 1977 and 1979 [illegible] 1980. Morrison follows the belief that Thucydides' date is [illegible] generation count, and that the first trireme, therefore, was built around [illegible] 1986, pp. 39–40. According to Casson 1971, p. 148 with n. [illegible], the latest secure reference to the active use of triremes occurs in the Zosimus passage.

scale replica of an Athenian trireme of the Classical period. Although different types of triremes were built throughout its long history of use, the standard "covered" example seems to have carried a full crew of 200 men. This included 170 oarsmen arranged in three superimposed files per side, with each man pulling his own oar. The dimensions of the class have been deduced from the covered slipways in which triremes were stored. On this evidence, a trireme's length and width must be just under the dimensions of the Zea shipsheds preserved at Piraeus, Athens' port city. These had a maximum dry length of about 37 m. and widths of about 6 m. each.

Before the introduction of the trireme, smaller ships with 20, 30 and 50 rowers (the *eikosoroi*, *triakontoroi* and *pentekontoroi*) seem to have been the preferred warship classes. Representations on Greek pottery of the Geometric and Archaic periods make it clear that the oarsmen on these vessels might be arrayed in either one file per side, or in two, one superimposed above the other. The development of a two-banked vessel [illegible] or trireme is thought by [illegible] to be an outgrowth of ramming warfare, since the new design shortened the length of the vessel, strengthened the integrity of the hull without any loss of oar power, and greatly narrowed the turning circle, thereby decreasing the time needed to turn the vessel in combat.

During the fourth century, classes larger than the trireme were introduced into the navies of the Mediterranean. Pliny says (on the evidence of Aristotle) that the Carthaginians were the first to invent a "four," and their lead was soon followed by Dionysius of Syracuse who added both "fours" and "fives" to his navy. By the time of Alexander the Great, these new classes had apparently been adopted by all the major fleets. By this time as well, the "six" had just been introduced at Syracuse by Dionysius II (c. 367–344 B.C.). Following upon Alexander's death, a naval arms race between his generals and their successors produced ships of still greater sizes, some of which were enormous. We hear of "sevens," "eights," "nines," "tens," "elevens," "thirteens," "fifteens," and "six-

[illegible]

teens," in the fleet built by Demetrius Poliorcetes. And at the height of his power, the fleet of Ptolemy II contained one "twenty" and two "thirties."

The largest ship produced at this time was a "forty," launched during the late third century by Ptolemy IV Philopator (221–205 B.C.). Primarily because of its incredible size, the ship's dimensions were written down and preserved. Its length measured 128 m, its beam 17.4 m; its stern and bow towered more than 20 m above the water (24.2 m and 21.9 m, respectively), and when empty its draft measured a surprisingly shallow 1.8 m. The four steering oars were each 13.7 m long, while the longest oars measured 17.4 m. On its maiden voyage, the vessel had 4,000 oarsmen, 2,850 marines and 400 men who served as officers, ratings and deckhands. According to Plutarch (*Demetr.* 43.5), it could be moved only with great difficulty and danger, and was intended solely as a showpiece.

Even if we dismiss the "forty" as an extraordinary freak, we are still left with the task of explaining the differences that marked one ship class from another. Since no physical remains of these warships have survived from antiquity, most scholars have focused their attention on describing their oarage systems as an outgrowth of their class names. Originally it was thought that these polyremes (i.e., vessels larger than triremes) were, on the model of the trireme, outfitted for increasing numbers of superimposed oar banks. Now most would agree that the ship's classification refers to the number of oarsmen in each "rowing unit." If each oar was seen as belonging to such a vertical unit, then the number of oarsmen who worked in that unit, regardless of the total number of oars, would provide the basis for the ship's class. A "three" has three oarsmen per unit and the unit consists of three superimposed oars. A "four" would then consist of four men per unit, and the unit would consist of two superimposed oars each handled by two men, or one oar handled by four men. A "five" would consist of five men per unit, and they could be arranged in one, two or three superimposed banks with the appropriate number of men per oar. Such a system can be extended to explain adequately the oarage systems of the various sizes,

For the evidence of [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Note that the placement of the [illegible]

Cf., for example, [illegible]

although one still wonders how this worked on the larger polyremes such as a "twenty," "thirty" or "forty."

Attention has focused on the oarage systems because we simply did not have much more to go on. Nevertheless, the differences between these ship classes must have extended beyond simple variations in how oarsmen were arranged in each rowing unit. Presumably this juggling of men per unit had something to do with differences in the dimension and weight of each class. This observation might seem obvious, but it needs to be stressed. In spite of the known fact that some types of "fours" and "fives" seem to have been similar to triremes except for their reduced number of oars, in general it seems that "fives" were larger and heavier than "fours" and that "fours" were larger than "threes." This distinction is important: if we cannot presume that a "ten" was physically larger than a "nine" and that both were larger than an "eight," how can we reasonably explain the different sized sockets on the front facade of Octavian's Campsite Memorial?

In general, the hypothesis that "tens" had more freeboard, and were heavier than "fives," is defensible. For example, Florus could maintain that Antony's fleet of "sixes" to "tens" was on average heavier, higher out of the water and more difficult to maneuver than Octavian's "twos" to "sixes." Plutarch says much the same thing, as does Dio. As stated above, there is clear evidence that on average a "five" was heavier and higher out of the water than both a "four" and a "three." Livy, for example, makes it clear that a "five" was slower than a "three," and was probably heavier. In a passage describing events of 200 B.C., Livy tells of three Carthaginian "fours" that were unable to ram a Roman "five" as it rounded a promontory because, he says, the Roman vessel was too fast. In the end, however, the "fours" seem to have been faster, since the crew of the "five" eventually drove their vessel on shore to escape. That the "five" was higher out of the water and thus heavier than the "fours" chasing it appears certain from this same episode. While the chase was on, the Carthaginian marines were unable to board the "five" from their "fours" because of the "five's" higher freeboard. If we knew more about these classes, we would no doubt find that the dimension and weight of each class were critical variables in the design

[illegible] 1971, p. [illegible] placed eight men per oar as the apparent limit [illegible] the greatest number [illegible] seventeenth and eighteenth centuries [illegible] eight men per oar [illegible] argues therefore that classes above the [illegible] with [illegible] decks bridging two parallel hulls. [illegible] explain the amazingly shallow draft of the [illegible]

[illegible] 1971, p. [illegible]

The [illegible] statement [illegible]. That he and his readers would accept that larger classes meant heavier, higher and less maneuverable ships is the issue.

Plut. [illegible]; Dio [illegible]

Livy [illegible]

Livy [illegible]

formula which determined the number of men placed in each rowing unit.

2. *The Ship Classes of the Sockets*

From this evidence, we feel justified in assigning the largest sockets with the largest cores to the largest ship class captured by Octavian. The sockets next in size should correspond to the second largest class, and so on. This, at any rate, is a reasonable theory with which to start, particularly since we lack sufficient evidence for a more accurate approach in determining the various ship classes of the sockets.

It is important now to ascertain as accurately as possible the "pool" of classes available to Octavian for selection after the battle's conclusion. Although the surviving accounts of the battle differ concerning the classes in Antony's fleet, Strabo provides us unwittingly with the answer we seek when he mentions the war memorial built by Octavian at the sanctuary of Apollo Aktios. Its grandiose scale made the dedication so noteworthy that Strabo described it for his readers even though a fire had consumed it by the time he composed his account. Thanks to Strabo, therefore, we know that one each of the ship classes fighting in the battle was dedicated "from a one to a ten." If we remember that Octavian himself claims to have captured 300 ships from the enemy, we can reasonably conclude that he had a full range of classes to dedicate at his campsite from "one" to "ten."

Adhering to the methodology outlined above, the largest sockets, such as [4], should correspond to a "ten." When we attempt, however, to

Strabo 7.7.6. [illegible]

[illegible]

The number [illegible]

determine the class differences among sockets smaller than [4], we are seriously handicapped by not having a full range of sizes visible for examination. Even though we know that ten classes are possibly exhibited here, the possibility for error in determining class differences is very great because we do not know how many classes are represented between [1] and [1.5], nor do we know the size of a "one." Fortunately, additional evidence, independent of the Campsite Memorial, is available for filling this gap at the lower end of our series. But before we turn our attention to it, we should discuss the problems inherent in the evidence we are forced to use.

a. The Significance of the Profiles

If we possessed a wealth of detail concerning warships of known classes from many periods of history, it would be soundest, methodologically, to utilize only that information from the mid-first century B.C. The different types of symbols cast onto the surface of the Athlit ram may indicate that it was made on Cyprus during the reign of Ptolemy V Epiphanes or, at the latest, during the early years of Ptolemy VI Philometor (i.e., between 204 and 164 B.C.).[1] If this supposition is correct, the Athlit ram would come from a ship more than a century older than the vessels which fought in the Battle of Actium.[2]

Certainly, changes in ship design will have occurred during this interval of time. For example, the depth profiles of the cuttings reveal that the Actium rams either had no tailpiece (cf. Fig. 27, all examples), that the tailpiece was quite short (cf. Fig. 28, 4.11; Fig. 29, R1, 1[illegible]), or that they were cut off before the rams were mounted. We will leave the full significance of this fact for others to determine, but the evidence independent of this monument implies that the rams had no tailpieces. If this is true, one wonders if some structural change lies behind this alteration of the ram's design.[3] One also wonders if this change affected the sizes of the rams assigned to each ship class. The evidence presented below for the size of a four's ram seems to imply that this class remained largely unaffected by the tailpiece change (if there ever was such a change for this class). Again, we must leave consideration of hull design to others more competent to judge, but the possibility that profound differences existed among ships of the same class over time must be admitted.

[1] [illegible]

[2] The normal lifespan of a [illegible] is thought to have been between 20 and 30 years [illegible]. The older ships [illegible] at Actium might have been [illegible] of the century.

[3] [illegible] suggested that the dropping of the tailpiece may correspond to [illegible] the late addition of a keel [illegible] this particular [illegible] from the fourth century [illegible]. If such a change had already occurred in the vessels at Actium, the effect this might have had on the overall size or weight of each class is unknown.

The overall appearance of the rams on the Campsite Memorial can best be discerned from the types of rams illustrated on other monuments of this period. The closest parallels we have found to the profiles preserved in the monument's sockets appear on a triumphal arch built during the first century of our era at Arausio (modern Orange, France). The arch is triple in form with each of the three subsidiary arches framed by Corinthian columns that support a continuous entablature running above all three arches. Between the tops of each side arch and the entablature is a space in which war spoils are depicted. Directly above these two sculptured areas are two rectangular panels located in the entablature (two panels appear on either side of the monument) which depict naval spoils. And among the items illustrated are a large number of warship rams whose after ends match perfectly the shapes recorded in the sockets of the Campsite Memorial (figs. 56 and 57).

After Actium, no major sea battles were fought in the Mediterranean. A good possibility exists, therefore, that the design for the rams on the Arausio arch derives from the massed naval spoils Octavian displayed in Rome upon his return in 29. Furthermore, except for their lack of tailpieces, the rams of the arch are similar in appearance to the example from Athlit. Whatever the structural differences determined by this dropping of the tailpiece in the years between 200 and 31 B.C., it seems to have had little effect on the rest of the ram's appearance.

Other considerations lead us to suspect that the ram size for each ship class was determined by additional factors only partially related to its lack of a tailpiece. J. R. Steffy's analysis of the 16 bow timbers preserved in the Athlit ram makes it clear that this weapon was carefully designed to transfer the enormous shock of ramming blows as equally as possible to the hull timbers of its ship. Such careful design was necessary if the attacking ship was to avoid damage from its own blows during combat. The ram, like a well designed hardhat, would have to withstand the tremendous force of impact without bending or cracking. Such strength could be partly achieved by the careful design of the head and fins, but it would also depend partly upon the quality of the bronze used, the thickness of the driving center, cowl and bottom plate, and the integrity of the casting. A well designed, well-cast, heavy ram would be necessary

[illegible] spoils from the Battle of Actium [illegible] profiles on the monument [illegible]

On this arch, see [illegible]

Propertius 2 [illegible] that Actium [illegible] arch without any particular [illegible] alluded to the [illegible] remarks of [illegible]

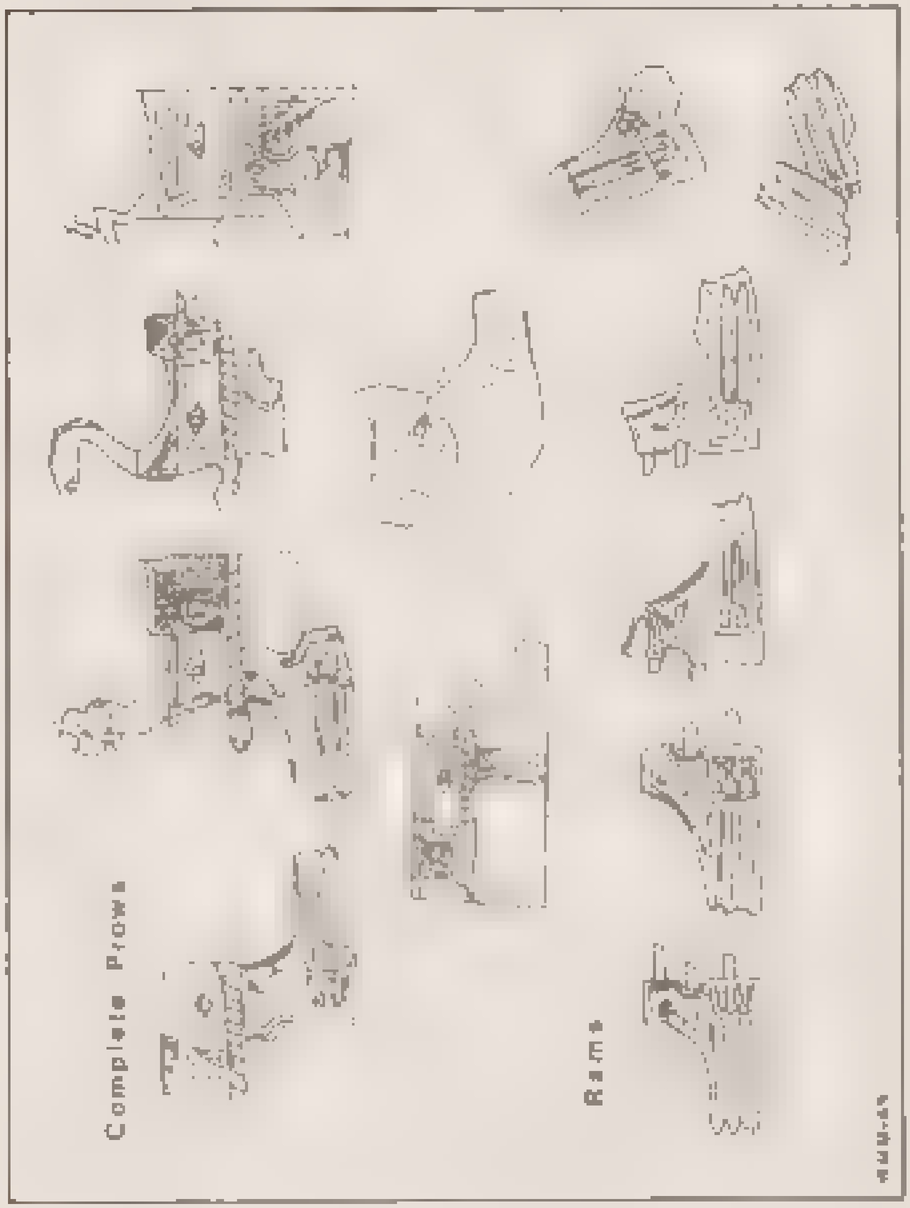


Fig. 57.

for a ship of immense size and weight, or it would fail under the stress of impact. And, if the dropping of the tailpiece was the result of heavier structural timbers, this too should have had an effect on the mass of the rams used by these vessels.

To be honest, we must admit our ignorance in all these matters. Even so, the paucity of evidence concerning ship classes from any period demands that we use whatever information is available. If we admit, however, that all conclusions based on such evidence are open to question, and keep this cautionary statement firmly in mind, we can now turn to the available evidence.

b. The Weight of the Athlit Ram

The most important information is provided by the two bronze warship rams surviving from antiquity because they represent the actual sizes and weights of two different ship classes. The larger example was found in 1980 off Athlit, Israel (Fig. 57), and the smaller one was purchased in 1987 by the Deutsches Schiffahrtsmuseum in Bremerhaven (Fig. 58).[?] Since both these rams are too small to fit into any of the sockets, they clearly must come from smaller ship classes. The problem is, of course, how small are they? Following the Athlit ram's discovery, some experts concluded that the weapon was quite large and must have come from a class considerably larger than a trireme. The evidence for this view rested primarily on the ram's immense weight of almost half a ton (465 kg). According to C. Torr's calculations from the sale of two trireme rams in 325/4 B.C., one ram weighed roughly 77 kg (170 lbs). Although no one ventured a precise guess in print, some scholars be-

[?] Both rams have already been discussed in the discussion of the socket's function and original number [illegible] ram appeared in [illegible] [illegible] rams are known [illegible] study. The ram in the [illegible] Museum [illegible] p. [illegible] Another [illegible] preserves a bronze sheath in the shape of a ram [illegible] in Athens. The ram [illegible] at the bow [illegible] she followed [illegible] believed (p. 224) that the ramming timbers [illegible] a piece of which she found [illegible] In light of [illegible] this view [illegible] is no longer tenable. If ramming timbers are indeed present at Masada, they must come from a completely different design than is expressed in the Athlit, Bremerhaven and Cumpster Memorial examples; cf. [illegible] pp. 215–17 for the evidence behind such a view.

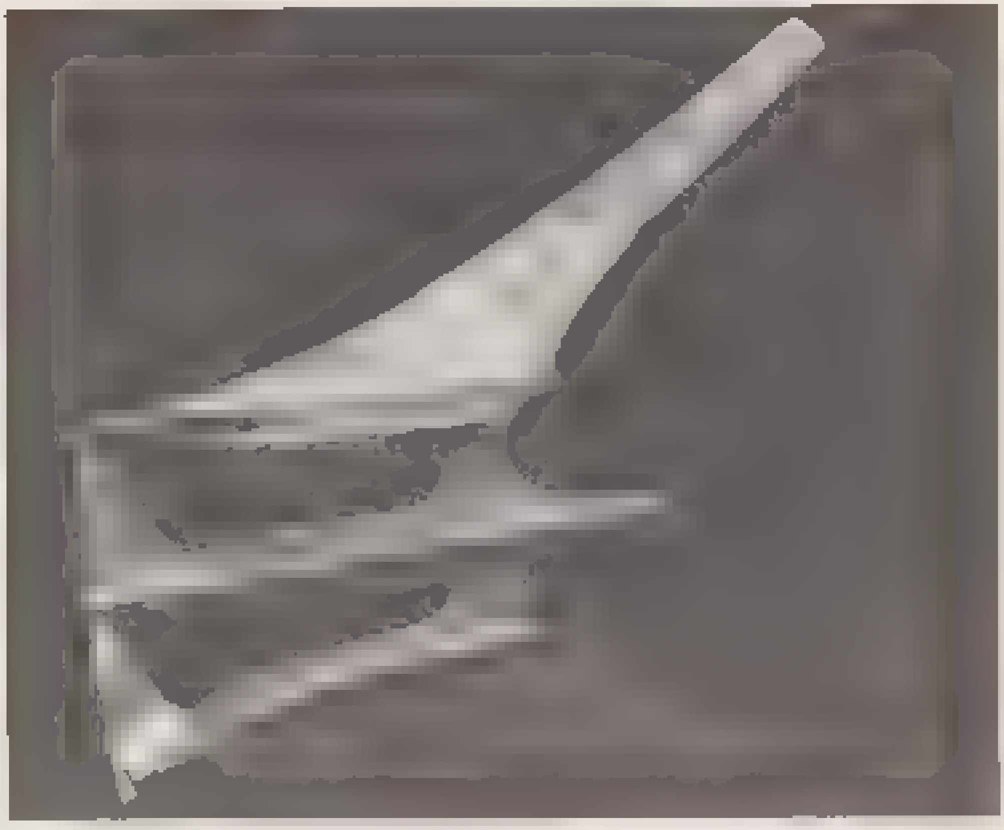


Fig. 58

lieved that the Athlit ram came from a ship larger than a "four" or "five" and perhaps from one as big as a [illegible] "ten" [illegible]

Under close examination, however, Tarn's calculations of 1894 do not stand up to the pictorial evidence found since his day. It now seems more likely that the rams in question were recovered from damaged ships, were themselves damaged, and were collected in fragments to be sold off as scrap. The average weight of the five rams sold was really about 44.5 kg (98 lbs)—clearly too light to be serviceable trireme rams.[illegible] And since the rams were collected over a period of years before being

[illegible] for example, [illegible] p. 248 [illegible] p. 217.

[illegible] which we believe [illegible] bronze battle [illegible] This is particularly evident [illegible] long, and were powered by [illegible] weighs about 40 tons [illegible] 22 tons; a full [illegible] about 2 tons [illegible] gear [illegible] the total weight to around 48 tons. A 44.5 kg ram would have been much too light to withstand the enormous stresses generated by the impact of a 48-ton mass (the trireme's total weight).

sold: it may be that the Curators in charge of the Athenian shipyards waited for sufficient bronze to accumulate before "selling" the metal to the foundry for the casting of a new ram. If this is so, the 23 kg. sold in 325/4 may be significant as a lower limit for the weight of a trireme ram.[illegible] We are not obliged, therefore, to interpret the Athlit ram solely in light of its weight. It may, in fact, correspond to a trireme, or to a "four" or "five" if we accept around 200 kg. as a minimum weight of a serviceable trireme ram.

c. The *Anaglypha Traiani* and the Sizes of Suspended Rams

Another piece of evidence that can be brought to bear on the size of a trireme ram is a pair of detailed reliefs called the *Anaglypha Traiani* showing the Roman Forum at the time of Hadrian.[illegible] The right panel (Fig. 59, bottom) depicts the burning of record tablets from the Tabularium on the occasion of a remission of taxes in A.D. 118; the *Rostra Augusti* is partly depicted on the extreme preserved right edge of the panel. According to the generally accepted view, the left panel (Fig. 59, top) shows the emperor (either Trajan or Hadrian) standing on the *Rostra Aedis Divi Iulii* (the Rostra before the temple of Divus Iulius) while a woman expresses thanks for the establishment of a program to help feed the children of needy families, the *alimenta* [illegible]. The great value of these two reliefs is the fact that the rams depicted on both rostra are roughly similar in size (cf. Figs. 59 and 60). Since such care is lavished on the proportional details of the foreground features (platforms, honorary statues and tablets), it seems likely that the artist has attempted to illustrate the rams of the two rostra in correct proportion to the figures that surround them. In each case, human figures appearing in close proximity to the rams allow for a comparison of their sizes with the Athlit and Bremerhaven rams, as well as with the sizes of the sockets on Octavian's Actium Monument.[illegible]

These rams are clearly smaller than the Athlit ram and yet significantly larger than the example from Bremerhaven. To what class do they correspond? In order to answer this question, we must determine the classes of the ships whose rams were chosen for display on these two rostra. As for the *Rostra Aedis Divi Iulii*, we know only that the rams came from ships captured at Actium in 31 B.C. The historical accounts tell us noth-

[illegible] pp. [illegible] 20 kg. [illegible]

[illegible] For photos of these reliefs [illegible] see [illegible] Vol. [illegible] pp. [illegible] the [illegible]

[illegible]

[illegible]

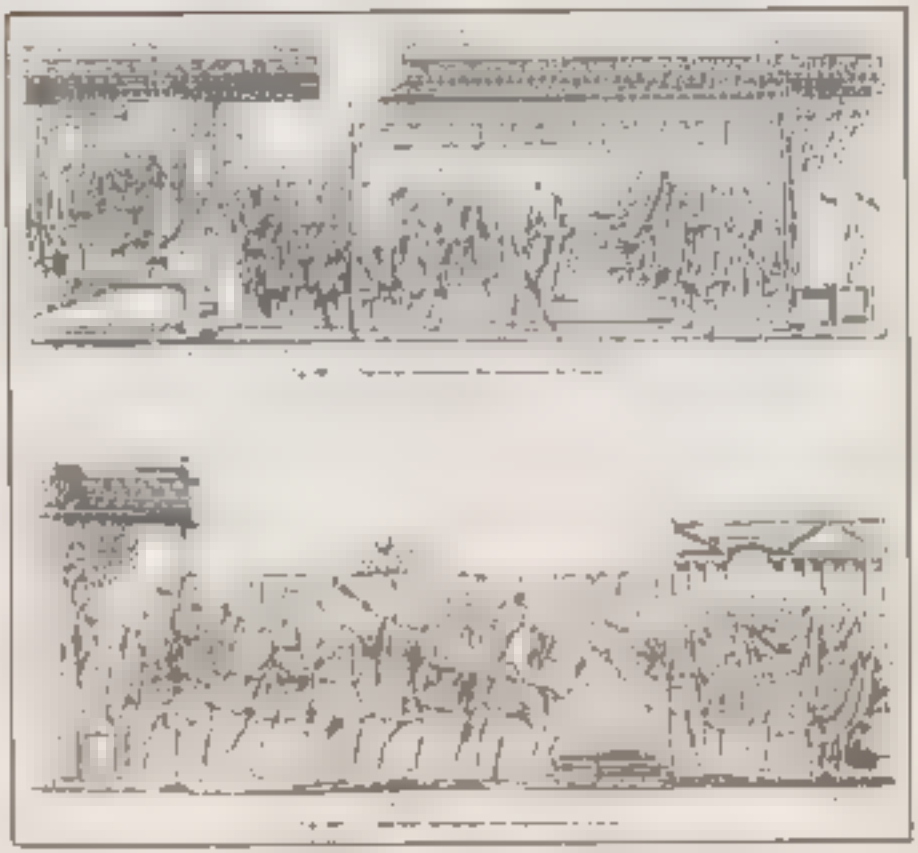


Fig. 50.

Fig. 60.

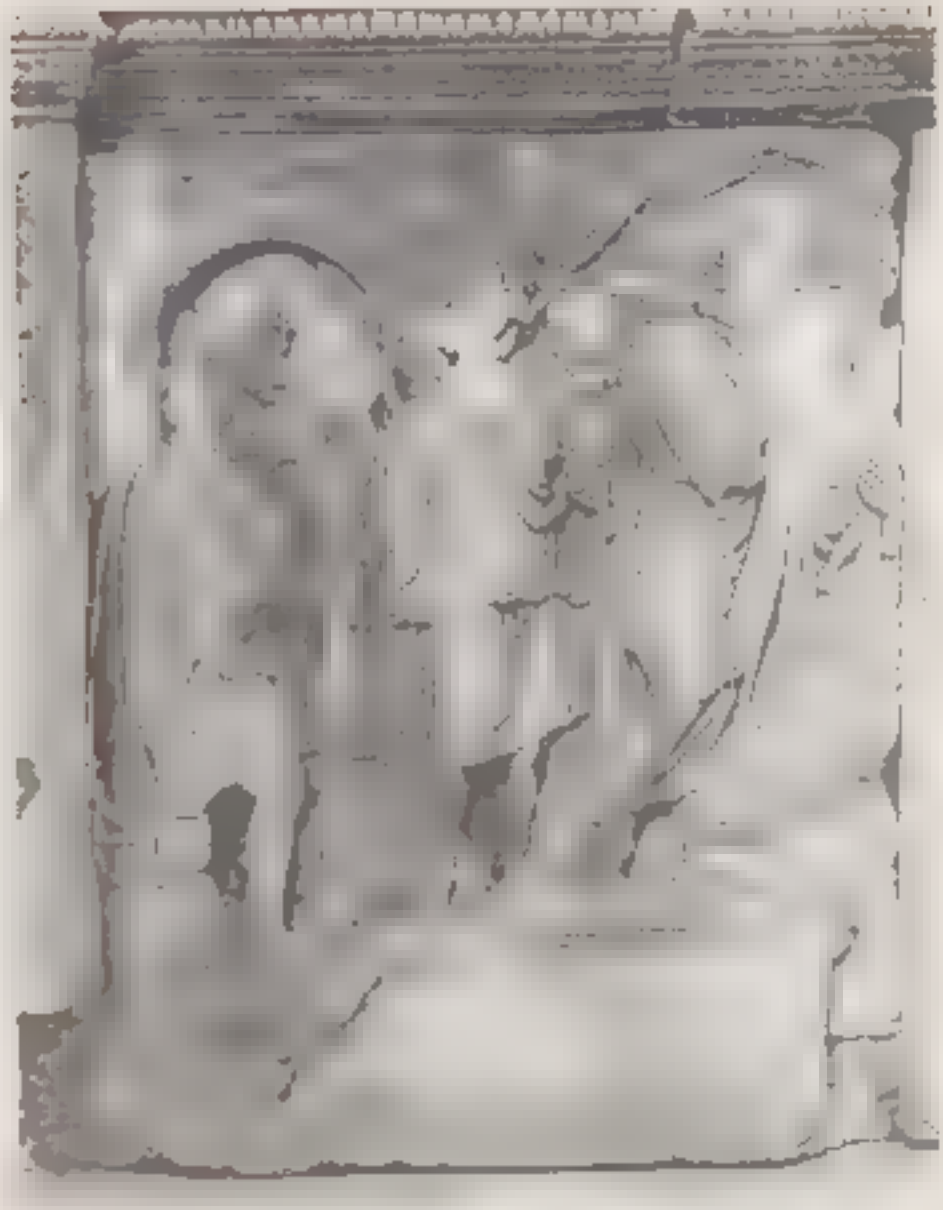


Fig. 61

ing about their sizes. We are fortunately in a better position to classify the sizes of the rams on the *Rostra Augusti* at the other end of the Forum.

([illegible]) The Rams of the Roman Rostra

Although the Republican speaker's platform was rebuilt numerous times and physically moved from its original position in 45 B.C., we know of at least two occasions (up to the reign of Hadrian) on which different groups of rams were affixed to its facade. The first was in 338 B.C. when six Antiate ships were stripped of their rams in order to decorate the platform for the first time. If we can trust the statement of Polybius that before 261 B.C. the "five" had not yet been introduced into any Italian navy, we can conclude that the Antiate ships were probably "threes." Even though "fours" are not ruled out by Polybius' statement, the Antiate navy could not have been very large, and the standard ship of the line in the small navies of this period was the "three." The first rams placed on the Republican Rostra, therefore, were most likely from triremes.

The second occasion occurred in the censorship of M. Antonius (97 B.C.) and is somewhat less certain than the first. According to Cicero (*de Orat.* 3.3.10), Antonius decorated the Rostra from the "manubiae" (i.e., monies realized from the sale of booty) resulting from his naval triumph over the Cilician pirates (probably won in 100 B.C.). The verb used by Cicero to describe Antonius' action ("ornarat") implies that he adorned the platform with some decoration. The clear implication of the passage is that Antonius adorned the platform with spoils from his naval victory, most logically the *rostra* from the ships he had captured. Considering what we know of Antonius' campaigns, the rams would have come from Cilician pirate vessels. According to Appian (*Mith.* 92), during the decade of the 80s the Cilician pirates began to add "twos" and "threes" to their fleets as a result of their association with Mithridates. The ships captured by Antonius, therefore, would have been no larger than "threes," and in fact might have been from various classes of Hellenistic light vessels like the *myoparo* (a "one") and the *hemiolia* (literally a "one-and-a-half"), or from "twos."

When the Rostra was moved farther to the west in 45–44 B.C., the selection of the censor's grandson to oversee the project implies that the

Cf. as well, Chapter IV, Sections 1 and 2.

Polyb. 1.20.10.

In 330 B.C., even the fleet of Athens, a naval super power in comparison to Antium, had only 18 "fours" as compared to 492 "threes" (cf. Casson 1971, pp. 97 and 124).

See also Chapter IV, Section 1.

Cf. Ormerod 1924, pp. [illegible].

For the *myoparo* and *hemiolia*, two classes of light vessels, see Casson 1971, pp. 128–32. Since our sources give no further details about M. Antonius' campaign, and since the pirates seem so bold during the decades of the 80s and 70s, it has been presumed that Antonius' naval successes were incomplete (cf. for example, Ormerod 1924, p. 209). The fact that Antonius was allowed to decorate the Rostra with his naval spoils, however, implies that his successes were not completely insignificant.

original rams were reapplied to the new structure.[illegible] Since Florus says that the original six from Antium were still visible in his day (the mid-second century of our era), we can presume that Antony also reutilized the rams dedicated by his grandfather.[illegible] We simply do not know if Antony selected additional rams from dedications elsewhere in the city, like those displayed by Pompey at his house (cf. Chapter IV, n. 12), to cover the face of the finished platform. We can be reasonably certain, however, that the ram-classes from the previous two Rostra (attested in the literary record) were from vessels no larger than the "three."

A recent study of the Forum's pavements suggests that between 14 and 12 B.C., Augustus enlarged the Rostra by raising the platform and adding a rectangular front (cf. Chapter IV, Section 2). If this was indeed the case, we must then assume that the rams were once again moved and remounted on the facade of this new rectangular structure. This much is implied by Florus' statement mentioned above. Once again, we do not know if Augustus added additional rams to those obtained from the previous monument, although the greater length of the facade would imply that he did. If new rams were added, however, their sizes are unknown. Nevertheless, from the right panel of the *Anaglypha Traiani*, from coins dated to 13 and 12 B.C. (Figs. 59 and 60), and from the positions of the holes in the facade of the Rostra itself, it is clear that the rams were suspended off the ground. This simple fact can be used to determine their maximum size.

2.3 The Sizes of Suspended Rams

In order to determine the maximum sized ram the Romans normally suspended off the ground, we must first consider the *Rostra Aedis Divi Iulii*. Although we are not told the sizes of its rams, their maximum size can still be deduced. From the clear representations of this rostra that have survived—one on the left panel of the *Anaglypha Traiani* (Fig. 61), the other on a coin type minted during the reign of Hadrian (Fig. 62)—we see how the rams were mounted. Both examples illustrate weapons

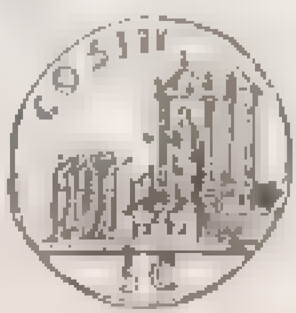


Fig. 62

[illegible] Cf. Chapter IV, Section 1.
[illegible] Florus 1.11.[illegible]; cf. Chapter IV, n. [illegible]

smaller in size than the example from Athlit, and both show the rams mounted midway up the face of a wall. The fact that these rams were suspended off the ground is a fair indication of their size. The Athlit ram, for example, which weighs half a ton, is simply too heavy to be mounted in this manner on such a wall.

If we consider the sizes of rams mounted on rostral columns, we arrive at a similar conclusion. Both its size and weight make the Athlit ram ill-suited for placement on a column such as that depicted on a denarius of Octavian (Fig. 63).[9] The rams available for placement on the rostral column of Duilius came from those ships that he captured, and these are recorded on the surviving inscription as one "seven" and 30 "fives" and "threes."[10] To judge from the sequence of sockets on the Campsite Memorial (cf. infra) which certainly includes "sevens" and perhaps also "fives," the "threes" were probably the rams mounted on his column.[11] Let us now review the facts at our disposal.

1. The rams on the Rostra at the west end of the Forum (those for which we have any evidence at all) are likely to be from ships no larger than the "three."

2. Judging from the two panels of the *Anaglypha Traiani*, the rams on the *Rostra Aedis Divi Iulii* are similar in size to those depicted on the west side of the Forum. They are by comparison, therefore, no larger than "threes." If we remember that Augustus considered ships smaller than "threes" not worth counting in his lifetime total of captured warships (*Res Gestae* 3.4), our conclusion that the rams mounted on this platform were no smaller than "threes" receives additional support.[12]

3. The rams on the *Rostra Aedis Divi Iulii* are of a size to come from a ship class that is smaller than the smallest socket currently visible on the Campsite Memorial.

4. The Athlit ram is too long and heavy to be suspended easily off the ground on the face of a wall in the manner revealed by the Hadrianic reliefs, and by the various coin types.

5. The Bremerhaven ram (Fig. 58), weighing only 53 kg., could be

[9] For the denarius of Octavian see [illegible] 1974, p. [illegible], #271. Cf. also the remarks of [illegible] 1988, pp. 41–42 with fig. 32.

[10] See Chapter IV, n. [illegible].

[11] If the smallest socket corresponds to a "four," then the largest class the Athlit ram could come from is a "four." If the smallest socket corresponds to a "five," then the Athlit ram corresponds to a "four." Since the [illegible] is clearly too heavy to be mounted on such a column and since Duilius did not capture any [illegible], we believe it likely that only the "threes" were used on the column. [illegible] is clearly represented somewhere in the sockets of the Campsite Memorial and thus is too large for mounting on a column.

[12] *Res Gestae* 3 [illegible]. [illegible] smaller than "threes" [illegible]. Although the [illegible] is not completely preserved, the number of [illegible], the fact that under Augustus the standard unit in the major Italian fleets was the "trireme" make the restoration certain. Cf. Casson 1971, p. 141.

Fig. 65.

easily suspended off the ground on the face of a wall, column or statue base.

The pattern emerging from these facts implies that the Romans were capable of suspending rams up to "threes" off the ground on the facades of their monuments. If they were capable of mounting "fours" in this manner, we have no clear evidence for it. This likelihood has two implications. First, the Athlit ram cannot come from a trireme. And second, the smallest sockets in the face of the wall are for rams larger than the "four," since the Athlit ram must represent a "four" or perhaps even a "five." We must now consider the variations in the sizes of the sockets to see if gradations exist that might represent differences in ship classes.

d. A Tentative Sequence of Ship Classes

The evidence currently at our disposal reveals that the ship classes corresponding to the preserved sockets should range from "tens" to "fives." We leave the determination of ship sizes from the dimensions of these sockets to naval architects. We believe, however, that one can appreciate certain obvious differences in size by comparing the shapes and exterior dimensions of the sockets depicted in Figures 20–22. Our attempt to form "groups" or clusters of similar sizes results in the following two sequences:

Sequence I

10 [1], [2], [4]
9 [3], [5], [6]
8 [7], [8], [9], [10]
7 [11], [12], [17], [19], [20]
6 [13], [14], [15]
5 [16], [18], [21], [22]
4 Athlit ram (Fig. 22, Ram 1)
3 suspended rams of the [illegible] (Fig. 22, Ram 2 from the trireme replica)
2 ?
1 Bremerhaven ram? (Fig. 22, Ram 3)

Sequence II

10 [1], [2], [4]
9 [3], [5], [6]
8 [7], [8], [9], [10]
7 [11], [12], [17], [20], [?]
6 [13], [14], [15], [16], [18], [19], [22]
5 Athlit ram? (Fig. 22, Ram 1)
4 Athlit ram? (Fig. 22, Ram 1)
3 suspended rams of the [illegible] (Fig. 22, Ram 2 from the trireme replica)
2 ?
1 Bremerhaven ram? (Fig. 22, Ram 3)

By presenting these two sequences we do not mean to imply that the precise classes of the sockets have been determined within these two limits. Each reader may arrive at his own conclusions by comparing the relative sizes of the individual sockets. The true importance of such an exercise, however, lies in the number of gradations in size identified in the surviving sockets. Regardless of their precise identifications, we feel

It should be noted that the ram of the [illegible] is considerably smaller than the Athlit ram. [illegible] Monument as shown in Fig. 22 as Ram 2 for the purpose of comparison.

that at least five gradations in size can be discerned (sequence II). Whether or not there are six, as suggested by sequence I, we are less able to determine, much less prove. A truly defensible sequence awaits the analysis of the sockets' dimensions by expert naval architects, which we are not. From the evidence presently available, the Athlit ram should come from a "four" or a "five." Even though we suspect that it belongs to a "four," we cannot prove it conclusively at this time.

The class of the Bremerhaven ram (fig. 58) cannot be determined with any certainty from these two sequences because of its very small size. The ram is clearly smaller than a "three," but whether it belongs to a "two," a *lembos*, or some type of "one" is impossible to deduce from the evidence of these larger sizes. Its very light weight (53 kg), however, inclines us to believe it comes from a very small warship. In the absence of additional evidence, we favor assigning it to some type of *monokrotos* or "one."

Finally, even the most casual inspection reveals that the sockets are not arranged in a strict sequence of sizes from large to small. This mixing of sizes hints that whoever placed the rams along the monument's facade either found it difficult to distinguish between the ship classes of the rams once the weapons were removed from their ships, or that some other factor no longer discernible (such as the length of each weapon's driving center or the weight of each weapon) helped to determine their placement along the wall. It is best to admit that much remains uncertain about the rams once displayed at Octavian's campsite.

One observation, however, emerges clearly from this analysis of the bow dimensions of ancient warships, and that concerns the massive sizes of the examples chosen for display on the Campsite Memorial. These rams were taken from classes much larger than those regularly employed in the navies of the period following the Battle of Actium. Certainly, this was one message that Octavian intended to convey through this memorial. But were there other, more subtle messages that lay behind the seemingly odd design of the Campsite Memorial?

We doubt that this ram could withstand the impact of a blow from even a moderately heavy ship powered by 50–100 oarsmen. In other words, we believe it must come from a very small ship, and this would correspond best to some type of "one."

IV: The Significance of the Campsite Memorial's Design

Official memorials of successful wars or victories are designed to inspire patriotism, pride and gratitude for the victor's accomplishments, which the Campsite Memorial clearly does. The intent of this monument, as we might have expected from one built by Augustus, goes beyond these limited ends. In order to understand the monument fully as a statement of propaganda, one first needs to appreciate the traditions behind its seemingly odd design. Many years ago, Gagé observed that Octavian had combined in this memorial "the Roman traditions of a trophy with those of the great commemorative monuments of the Greek world."[1] Although our reconstruction of the monument is somewhat different from Gagé's, we agree fully with his observation that the design mixes both Roman and Greek elements. The separation of these strains is necessary to determine the full scope of the message the memorial was intended to convey.

Greek dedications following important naval victories usually consisted of captured naval gear: detached rams, figureheads, anchors and ropes, etc.[2] On exceptional occasions, however, whole ships were offered in thanksgiving, usually at sanctuaries near the battle site. For example, a Phoenician trireme was dedicated to Poseidon at the Isthmus, to Athena at Sunium and to Ajax at Salamis after Xerxes' defeat in 480 B.C.[3] The Peloponnesians dedicated an Athenian trireme to Poseidon at Rhium in 429 B.C.,[4] and we know that at least one warship (and perhaps there were others) was dedicated to Apollo on Delos during the Hellenistic period. Here, in fact, the remains of a building suitable for a warship have been identified. Recently, another such building, with supports to hold a ship's hull [illegible], was discovered in the sanctuary of the Great Gods at Samothrace.[5]

[1] Gagé 1936, pp. 57–58.

[2] After victories over the [illegible]

[3] Hdt. 8.121.1.

[4] For the dedication at Rhium, see Thuc. 2.92.5. [illegible]

Inspired by this Greek tradition of offering whole ships, Octavian decided to dedicate a purely Greek-style monument at Apollo's sanctuary on Cape Actium. Not to be outdone by anyone before his time, Octavian dedicated a full complement of ten ships—one from each ship class that had fought in the battle. Set inside shipsheds (called *neoria* by Strabo) attached to the sanctuary, these vessels constituted an offering unparalleled in size by any other whole warship dedication known to us from the Greek world. In making this offering, Octavian followed firmly in the traditions of the greatest and most powerful of the Hellenistic monarchs who had tried to outstrip one another in the size and complexity of their naval vessels. Octavian built a monument at Actium appropriate to the grandeur of these ships—large and showy. It revisited a theme that was destined to become a central element in all subsequent accounts of the Actian War. The final battle on September 2 marked the last extensive use of these giant ships in the navies of the Mediterranean powers, and in the following generation, the standard ship of the line was once again the trireme. As if to mark the passing of an era, the memorial at Apollo's sanctuary burned to the ground sometime during this same generation.

For the major monument of his own personal foundation, his "Victory City" built on the site of his army's camp, a purely Greek-style memorial to the Actian War would not do. As it was built on the sacred site of Octavian's own tent, a particularly Roman image was desired for its outward appearance. For this purpose, Octavian approved a design which recalled the glorious days of the Roman Republic. And as was frequently the case, his reasons for this choice were complex and his intentions subtle. To understand what he was trying to accomplish, we must now consider the Roman traditions of naval dedications.

The Romans, like the Greeks, also dedicated parts of captured ships in the temples of their gods. And, as with the Greeks, rams seem to have been a favorite dedication. Rams were also dedicated outside the confines of their temples in ways unique to the Romans. For example, C. Duilius (who was the first to win a naval triumph in 260 B.C.) was

system at Delos between 262 and 245 B.C.). For the building at Delos, see [illegible] 1921 [illegible] 1969, p. 1[illegible] believes that the [illegible] originally [illegible] dedicated by Demetrius [illegible] pp. [illegible] in his analysis. They believe that the [illegible] fourth-century building may be identified with the [illegible] in Delian inscriptions that mention the [illegible] *Neorion*, [illegible] a number of ships. The discovery at Samothrace was made in the summer of 1986 and has not yet been fully published. For a photograph of the ship base [illegible] 1986, p. 11.

Cf. chapter 1, p. [illegible], with n. 25.

For a discussion of the large polyremes in the Hellenistic navies, and of the largest ship produced by this naval arms race, a "forty" built by Ptolemy IV, see Casson 1971, pp. 97–116 and 137–40.

Casson 1971, p. 141.

Cf. chapter 1, n. 24.

Much of the evidence for this assertion comes from depictions on coins. Parts of ships grouped around a column or on a pole or a trophy on the prow of a ship appear on coins after the time of Pompey; cf. [illegible] 1918, p. 518.

awarded two *columnae rostratae*: the more famous of the pair stood on or near the Rostra and was surmounted by a bronze statue of the consul. This column, ornamented with a few of the captured rams suspended off the ground, bore an inscription on its base detailing the Carthaginian ships captured and sunk by the consul at Mylae. Two other examples are known: one was granted to M. Aemilius Paullus, consul in 255 B.C., and was struck by lightning in 172 B.C.; the other was awarded to Octavian following his victory over Sextus Pompeius at Naulochus in 36 B.C. (cf. Fig. 68). The one of Duilius, being the first and placed conspicuously in the Forum [illegible], became the best known.

The use of rams as ornaments on other kinds of monuments, both public and private, is also attested. For example, Pompey displayed in the foyer of his own house some of the rams he captured during the Pirate War. And from the image appearing on a coin minted in [illegible] it is possible (though not absolutely demonstrable) that the base of an equestrian statue of Agrippa was ornamented with several rams (Fig. 69). By far the most venerable and famous display of rams, however, was the Rostra or speaker's platform in the Forum Romanum. This was the monument that provided the inspiration for the [illegible] dedicated in 29 B.C. A brief consideration of the Rostra's history will help to explain the powerful associations it held for Octavian.

1. [illegible] Rostra

The first true Rostra was created from the south-eastern speaker's platform in the ancient Comitium some time [illegible] when C. Maenius attached six warship rams to the front of its podium. While consul in 338 B.C., he had won a decisive victory over the Volscians who held Antium, a coastal city [illegible] to the south of Rome. As

[illegible]

a result of his success, the Antiate navy had been confiscated and their ships towed up the Tiber to Rome where some were presumably kept for use and the rest burned. Some [illegible] of these ships were attached in some way to the speaker's platform which henceforth took its name, "Rostra," from the naval spoils decorating its facade. Archaeological remains of a good candidate for this platform have been located near the Comitium, and according to the recent analyses of F. Coarelli (based on the work of E. Gjerstad) ought to correspond to a rectilinear podium ("platform C") of the Comitium's fourth paving phase.

At some later time, the rectilinear platform corresponding to Maenius' Rostra was replaced with a new structure having a curved front and steps. This phase (corresponding to pavement V) is not easy to date solely from its preserved remains but should fall sometime between 338 B.C. and the date of the seventh paving phase, around 80 B.C. Gjerstad assigned this rounded platform to the period of Sulla's alteration of the Comitium, but according to Coarelli's revised chronology it should correspond to a transformation of the Comitium into a circular theatral area during the first half of the third century B.C., sometime between 280 and 263 B.C.

If Coarelli is correct, this rounded Rostra must have been the one embellished in 87 B.C. by the orator M. Antonius. The evidence for this act has strangely gone unnoticed by Coarelli, but is clearly presented by Cicero in his *De oratore* (3.10): "Nam M. Antonius, on the very platform on which as consul he had most zealously championed the cause of the state and which as censor he had decorated with the trophies of his military command, and drawn the sword that had preserved the lives of many men [illegible]." If Cicero is correct, Antonius (the grandfather of the triumvir) must have decorated the Rostra from the spoils of his naval

[illegible]

was thus formed from which steps led up to the rectangular platform. Later a brick projection on the east was added in the fifth century to display rams taken from the Vandals.

Coarelli has also reexamined the evidence for this structure and has concluded that the original interpretation of the excavator, F. M. Nichols, should be followed. Instead of being later in date, the so-called Hemicycle is [illegible]. He points out, therefore, that the [illegible] year this project was started, it would depict the new Caesarian monument and not the rounded [illegible] Comitium which was going out of use. In fact, it was probably omitted to stress the uniformity in appearance between the two platforms.

What then of the rectangular platform? Dio [illegible] clearly states that the new monument was [illegible] and dedicated in [illegible]. If we identify this monument with the Hemicycle, then it must predate the rectangular rostra, [illegible] and this is what the remains tend to confirm. [illegible] but the evidence from the north side of the monument [illegible] to demonstrate the relationship between the two structures. [illegible] clearly sets on top of the [illegible] for the Hemicycle and thus should postdate it. In addition, the rectangular structure must have been built [illegible] at the same time as the pavement which respects its front face, [illegible] perhaps the [illegible].

Whether or not one accepts this new interpretation of the evidence, Dio clearly states that [illegible] Antony the honor of putting his name on the [illegible]. If we remember that Antony [illegible] the [illegible] monument, the project's [illegible] makes perfect sense, particularly if the [illegible] was to be applied to the new platform. [illegible] Caesar relocated a great Republican monument through a member of the same [illegible] that had previously rebuilt and decorated it. Antony's dedication of the project would have [illegible] any

[illegible]

connections between this monument, Antony, and the proscriptions were buried at last beneath the concrete of the new platform, hereafter called the *Rostra Augusti*.

In light of this evidence, we believe it possible that a coin minted in 12 B.C. by Cossus Cornelius Lentulus (fig. 64) depicts this new monument and thereby dates the completion of the project. In the past, the statue on this coin has been assigned to Agrippa (who died in this year) because the rams on the base were thought to allude to his numerous naval victories. Although the secure identification of the statue remains a problem, we believe that the rams are an attempt to depict the newly finished facade of the *Rostra Augusti*. In an abbreviated side view of the speaker's platform, one sees the intended equestrian statue placed atop a high pedestal ornamented with rams suspended off the ground in two levels, an arrangement that corresponds perfectly with the surviving holes on the monument's facade. A trophy is placed over the shoulder of the seated rider and alludes, perhaps, to the recent

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

victories won by Agrippa, or more likely by Tiberius, over the Pannonians.[4]

Another coin, minted a year earlier by C. Sulpicius Platorinus, apparently shows this new rectangular Rostra as well, in a very abbreviated view. Augustus and Agrippa sit atop a rectangular platform decorated with three rams suspended … Perhaps this coin marks the construction of the new podium, while the coin minted by Lentulus marks the project's final completion a year later when the statue of Octavian was moved … to its new position.[5]

Fig. [illegible]

[illegible]

[illegible]

[illegible]

V: Nikopolis, the First *Aktia* and the Dedication of the Campsite Memorial

In the first few weeks after September 2, 31 B.C., it became increasingly apparent to Octavian and his advisers how complete a victory they had won. Antony's power at sea and on land was damaged beyond repair. In addition to the 300 to 350 warships that had been taken from the enemy, most of Antony's nineteen legions surrendered under terms after a week of negotiations. Many of these men were incorporated into Octavian's army, but those beyond military age were discharged immediately and sent back to Italy. Octavian now had more soldiers than he needed, and so Agrippa was dispatched to Italy to supervise the discharge of superfluous units. Meanwhile, Octavian traveled eastward through Macedonia and central Greece to reward and punish cities and rulers according to which side they had taken. Presumably, men were left behind at the army's camp to gather the spoils and arrange for their protection until Octavian ordered them shipped elsewhere. The captured warships were probably gathered near the army's camp for inspection. Those not wanted were stripped of all useful gear, including their rams, and then burned. At least one of each type, however, was set aside for a large dedication planned for the sanctuary of Apollo Aktios. As these matters progressed at the camp near Actium, Octavian arrived in Athens and, around the first week of October, was initiated into the Eleusinian Mysteries.

1 Although Plutarch [illegible] the number of ships that fought on each side of the battle, we know [illegible] captured [illegible] ships from Antony. [illegible] of the arms.

2 Dio 51.3.1–2.

3 Dio 51.?.1–2.

4 The victor normally destroyed all captured warships [illegible]. For example, some of the ships taken from [illegible] the Carthaginians [illegible] Second Punic War [illegible] burning of ships before and during [illegible] ships after the Battle of Actium [illegible].

5 Dio 51.4.1. The Mysteries were held from 15 to 22 Boedromion, with a return to Athens

From Athens, Octavian crossed to Samos, where Suetonius specifically says he took up winter quarters, but was forced to return to Italy in "mid-winter" (i.e., December-January) to quiet further problems with the veterans. The Senate as well as some veterans met him at Brundisium to discuss the grievances of those recently discharged. Money was handed out to some, while land was given to those who had served with him the longest. According to Dio, this land was taken from communities in Italy which had sided with Antony. Those dispossessed by this process either received payment, promises of payment, or a new plot of land in Dyrrachium, Philippi and elsewhere. Even after all this had been done, some veterans remained unrewarded except by promises of future benefactions. As a show of good faith, Octavian put his personal property up for auction, and when no one came forth as a buyer, it was clear his promises had been accepted and the crisis was over.

After a stay at Brundisium of only 27 days, Octavian hastily returned to Asia. The following summer, he marched through Syria to Egypt, took Pelusium and descended on Alexandria. Antony put up a brief resistance, and after an infantry defeat committed suicide. According to the *Fasti*, the date was August 1. Cleopatra's suicide followed some nine days later on August 10. Sometime soon after these deaths, Octavian founded a city on the site of the final infantry battle. And, in a tradition reaching back to Alexander the Great, he also held athletic contests in honor of the victory. The words of Dio make it quite plain that the new city, called Nikopolis, was the second of that name; according to him, at least, the Nikopolis in Epirus had already been established. Just when this previous settlement had occurred, however, is difficult to determine.

One wonders if plans for the Epirote Nikopolis were not first discussed at the winter meeting in Brundisium. Since it was not mentioned in connection with the resettlement plans devised there, we might assume the city was not yet in existence. But if we accept the clear statement of Dio as valid, Octavian must have initiated the synoecism that created Nikopolis during the winter or spring of 30 B.C. The execution of so energetic a plan, encouraging people to move from their paternal

---

on the 23rd of the month. [illegible] the 19th and still receive the "standard" [illegible] on the 20th and 21st of the month [illegible] pp. 261–65, for the days of the [illegible] corresponds to the latter half of September and the beginning of October.

Dio 51.4.1; Suet. *Aug.* 17.3.

Dio 51.4.5.

Dio 51.4.6.

The debts were eventually made good, according to Dio (51.4.8), from the spoils of Egypt.

Suet. *Aug.* 17.3.

[illegible] 1967, pp. [illegible]; [illegible] 1956, pp. 195–206.

Dio 51.18.1 (trans. [illegible]): "After accomplishing the things just related Caesar founded a city there on the very site of the battle and gave to it the same name and same games as to the city he had founded previously."

homes, as well as from their ancestral tombs and shrines to a completely new settlement—would have required management, manpower, money and a degree of coercion, items in short supply until the capture of Alexandria. In sum, Epirote Nikopolis may have been "founded" prior to its namesake in Egypt, but its true development could not have begun until the wealth of Egypt was used to finance the plans of the victor.

During the rest of the year and into the winter months of 29 B.C., Octavian settled matters to his liking in the East, while the Senate at Rome voted him honor after honor. At some time during this period, it was decreed that the podium of the Divus Iulius temple be decorated with rams taken from the enemy fleet at Actium. From this decree, it seems possible that some of the battle spoils (like the bronze rams) had finally arrived in Rome. If this was the case, then the selection of rams for the Campsite Memorial had already been made and the monument was presumably under construction.

On this timetable, the builders would have had just under a year to complete the project if it was ready when Octavian returned to Nikopolis in early August 29 B.C. (see below). This short construction schedule explains why many blocks in the existing structure bear signs of reuse. Obviously taken from abandoned structures in the nearby regions, many blocks were hurriedly transported to the site and then recut to fit the new memorial. Even the massive blocks for the retaining walls look as if they are reused (and recut) from some nearby fortification.

By the winter of 29 B.C., Octavian had made his way back to Asia

[illegible] 1987, pp. [illegible] argues that the [illegible] may even have been destroyed to discourage people from returning to their ancestral homes. [illegible] removed from their [illegible]

For the arrangements made at this time, see [illegible] pp. [illegible]. The honors voted [illegible]

Dio 51.19.2.

[illegible] about [illegible] Augustus [illegible]

It should be remembered that [illegible] The population of the region had declined [illegible] evidence from western Macedonia [illegible] were transported to the new city [illegible] Chapter 1, n. 25), the reused blocks in the Campsite Memorial suggest that building materials were taken from these abandoned [illegible]. For evidence of this process from Kassope in Epirus, see [illegible] 1987, pp. [illegible]

If the blocks of the south wall were originally from some nearby fortification, it would explain a few curious cuttings which seem to serve no purpose on the top of the third course at the following places: [illegible] in the block to the left of [D] and in the block to the right of [illegible]; a rectangular cutting can be seen in the block forming the left side of [D] and in the block to the right of [F].

where he learned to his great delight that the Senate, on January 11, had closed the temple of Janus Geminus with the pronouncement "after peace had been secured on land and sea." At this time perhaps, or soon after, he must have composed or approved the text of the dedication for the Campsite Memorial containing the proud words PACE PARTA TERRA MARIQUE, which was then forwarded to Nikopolis for masons to carve into the frieze course of the wall. The disposition of the inscribed letters makes it clear that the frieze course was already in place on the monument before the text was carved.

By now, Octavian's main concern was the orchestration of his arrival back to the shores of Italy and his triumphant entry into Rome. First, transport back to Rome had to be arranged for the immense amount of booty he had captured. And second, he needed performers, wild animals and athletes for the extravagant celebrations he staged following the three triumphs awarded him by the Senate and the dedication of the temple to Divus Iulius. One can imagine the boat loads of participants that poured into Rome from the East in the weeks before August 13, the day Octavian entered the city.

His route back home led past Actium and Nikopolis, which awaited his presence for its own dedication ceremonies. From the date preserved in the text on the Campsite Memorial, it seems reasonable that

The date of the temple's closing is preserved in the [illegible] (Degrassi 1963, pp. 112–13 [illegible]) [illegible] the likely text of the pronouncement is discussed [illegible] For Octavian's route [illegible] through Asia, see Dio 51.21 [illegible]

[illegible] it seems clear that single letters of the text [illegible] could have been carved [illegible] already in place on the monument.

[illegible]

[illegible] held at the dedication of the temple of [illegible] the whole spectacle lasted many days [illegible] August 18, three days after the last day of his triple triumph [illegible]

[illegible] the dates of Octavian's triple triumph can be restricted to August 13–15, 29 B.C. [illegible]

The usual route between Greece and Italy [illegible] up the western coast of Greece [illegible] Augustus [illegible] would have passed Nikopolis on his way back to Rome in 29 B.C.

Augustus was present at its dedication too. This event, logically, would have accompanied the dedication of the new city, and perhaps the first celebration of the Actian Games, a week or two before August 13. Our sources are unclear on the year of the first *Aktia*, and the confusion may stem from the fact that in subsequent years the games were held on September 2, the anniversary of the battle. But for this year, the presence of Octavian, the city's *ktistes* or "founder," was much more important than niceties of specific calendar dates. The date of the inscription ("imperator septimum"), the fact that three chronographers assign the official foundation of Nikopolis to the first year of the games (cf. n. 25), and the fact that Octavian sailed by Nikopolis just prior to his triumphal entry on August 13, attended by performers and athletes on their way to Rome, make it almost certain that Nikopolis, the *Aktia* and the two war memorials were dedicated within the span of a few days in early August 29 B.C. And since these events were to be greatly overshadowed by the festivities in Rome, they were not emphasized in the accounts of contemporary historians.

When Dio composed his account, he described these events immediately following the conclusion of the battle since it provided the raison d'être for the "Victory City" and war memorials. But in 31 B.C., Octavian did not have the same kind of leisure to settle cities and lay out monuments as he did following his final victory over Antony at Alexandria. In order to alert his audience to this fact, Dio (51.1.3) reminds us that as concerned Nikopolis, "these things were done later." It appears, in fact, that the official dedication ceremony occurred almost two years after the victory at Actium.

And so, the monument was dedicated in 29 B.C., with Octavian most likely in attendance. The effect on those present who had participated in the war would have been undoubtedly powerful. Finally, after years of war, there seemed a real hope for peace. And this seems to have been an important part of the message conveyed by the monument in subsequent years. Tourists might gawk at the sizes of the rams, recreate the great battle in their minds along the lines of the "official" historians, or ponder the stories they had heard about "the Egyptian woman" and how close she had come to conquering Rome, but in the end, the words

[illegible] under the year 28 B.C. [illegible]

[illegible]

pace parta terra marique had the biggest impact. This, at least, was what struck Philippus when he noticed that bees had built their hives inside the rams and mused: "He has taught the enemy's weapons to bear the fruits of peace instead."[7]

[illegible] the remarks of [illegible], p. [illegible]: "[Octavian] promised no impractical social programme [illegible] a new age [illegible] and a revival of the best of the past. [illegible] frustrated. Victory [illegible] peace [illegible]."

VI: New Light on the Battle of Actium

Although some like Philippus might appreciate the Campsite Memorial's message of peace, we must not forget that the monument's primary purpose was to glorify the Actian War and the victory gained over Antony's armada. Considering this fact, we are fully justified in looking for clues concerning the Battle of Actium and the nature of the fleets that determined its outcome. In so doing, we might even resolve disputes between conflicting ancient accounts or recover details that were eventually dropped from the surviving battle narratives. We begin first with the dominant interpretations of the battle's character that have emerged over the years, and then turn to the evidence of the Campsite Memorial.

1. *The Kromayer-Tarn Debate*

In 1899, J. Kromayer published what still remains the fundamental study of the battle.[1] The reconstruction he crafted relied heavily upon the secondary source tradition found in authors like Dio, Plutarch and the epitomators of Livy—Florus and Orosius. He argued that Antony intended to retreat from the Ambracian Gulf with as many ships as he could save and continue the war elsewhere. The battle was hard fought and was won by Octavian after some four and one-half hours of combat. A. Ferrabino challenged this view in 1924[2] by arguing that Antony intended to fight for victory on September 2, not flee, and that he lost because a general of his refused to fight and returned to harbor. His arguments were provocative but inconclusive and, although they were adopted by some scholars, did not receive widespread acceptance.[3] In 1931, the same year that Kromayer published a new defense of his views, W.W. Tarn published his own reconstruction of the battle based in part on Ferrabino's earlier conclusions.[4]

Tarn, like Ferrabino, believed he could detect an alternate version of the battle in contemporary sources of information that were less contaminated by Augustan propaganda than were the standard historical narratives.[5] He started from Ferrabino's interpretation of Horace's *Epode* 9, which both men thought was composed just after the battle. He

[1] Kromayer 1899.

[2] Ferrabino 1924 was the first to emphasize the importance of Horace's *Epode* 9 as a contemporary source which preserved an alternate version of the battle.

[3] Cf., for example, [illegible] 1928, pp. [illegible], who accepted Ferrabino's conclusions; and [illegible] 1925, pp. 253–56 [illegible].

[4] See Kromayer 1931, pp. 362–71 and Tarn 1931.

[5] Tarn 1931, esp. p. [illegible] and 1938, p. 168.

concluded from two lines of the poem (lines 19-20, cf. note 11), which refer to some sort of naval maneuver, that a large portion of Antony's fleet returned to port without fighting and thus left Antony no other option but flight. Tarn maintained, therefore, that the actual battle was quite limited and unimpressive. The arguments he brought to bear were so seductively ingenious and so powerfully stated that he succeeded in forcing Kromayer and others to reconsider the validity of the secondary source tradition.

Two years after Tarn's article appeared in print, Kromayer responded in a paper which defended the validity of his original views. Though Tarn remained largely unconvinced, others came to Kromayer's defense. They argued that the contemporary evidence cited by Tarn was too limited in scope and required too high a degree of interpretation to provide a substitute for the clear (if sometimes overembellished) secondary historical narratives. They also demonstrated that it was possible to interpret the contemporary evidence in a manner that was perfectly consistent with the secondary narratives of the battle.

Understandably, this debate has produced two different versions of the battle. In order to decide which one corresponds better with the evidence from our memorial, we must first categorize the significant differences between the two versions. What follows is a brief discussion of five major points that we feel differentiate the two versions resulting from the Kromayer-Tarn debate. They are discussed in the following order: the nature of Antony's battle-plan, the number of combatants, the use of fire in the battle, the degree of destruction suffered by the losers, and finally, the military significance of the battle.

a. Antony's Battle Strategy

> [illegible]

The nature of Antony's battle plan lies at the core of the debate. Kromayer argued that by the end of summer 31 B.C., retreat was the only reasonable option left to Antony. As a result of Octavian's smothering blockade, which had kept Antony's fleet bottled up inside the Ambracian Gulf, Antony's forces had suffered severely. He had experienced a number of defeats on land and at sea; he was encamped in the malaria infested lowlands which formed Cape Actium; and as a result, many of his men had either died or deserted to the other side. By the beginning of September, Antony had no other choice but to burn those ships he

[illegible] ... pp. 20-27 ... 1976, pp. 45- ... Kromayer's and Richardson's arguments.

could no longer man and to lay plans for an escape from the gulf with as many ships as he could save.

For those on the other side of the debate, Antony primarily sought battle on September 2. Ferrabino was the first to argue this position; Tarn agreed but added that Antony was also prepared to retreat toward Egypt if the battle went against him.[1] Subsequent opinion has largely sided with Kromayer on this particular point.

As for Cleopatra's treacherous flight, both sides agreed that the queen fled the battlefield as part of a planned maneuver. For Tarn, Antony was forced to call for this retreat because a significant portion of his fleet (around 30 ships) deserted the line and returned to harbor, an event that he believed was intended to [illegible]. For those who accepted, with Kromayer, that the battle plan primarily called for a "breakout," Cleopatra's successful escape showed her well-headed use of the afternoon's sea breeze rather than an act of cowardly treachery.[2]

b. Numbers of Combatants

What were the [illegible]?

In order to determine the magnitude of the struggle at Actium, we need to establish the sizes of the forces that participated in the final battle. The evidence has been discussed extensively by Kromayer and Tarn,[3] and their conclusions have been recently summarized and discussed by G. W. Richardson,[4] J. Carcopino,[5] F. K. Johnson,[6] [illegible]. Both the extensive review of the matter[7] seems reasonable to accept the numbers recorded by Dio and Orosius, which apparently go back to Livy's account,[8] that

[1] [illegible]

[2] [illegible]

[3] [illegible]

[4] [illegible]

[5] [illegible]

[6] [illegible]

[7] [illegible]

[8] [illegible]

Antony manned about 170 vessels on the morning of the final battle. If we add to this number the 60 ship squadron of Cleopatra, the total Antonian fleet numbered around 230 vessels. This means that out of the original fleet of some 500 vessels (Plut. *Ant.* 61.1), more than one-half of its strength had been lost to the enemy, burned before the battle (see below) or stationed elsewhere. From this same tradition, although the numbers require some interpretation, it seems reasonable that Octavian manned about 400 ships to oppose Antony's 230.

c. The Use of Fire

How many ships [illegible] did Antony burn before the battle? Did Octavian start a general conflagration among the enemy ships in order to [illegible] [illegible] the course of the battle [illegible]?

According to Plutarch and Dio (Plut. *Ant.* 64.1; Dio 50.15.4), Antony burned an unspecified number of ships before the battle because he could not man them. Kromayer estimated the number as 60–90 ships, and concluded from the number of casualties he sustained (Plut. *Ant.* 68.1) that he lost an additional 40–50 ships during the battle, probably to fire. Since Tarn believed there was no great battle on September 2, he argued that the references to fire in the surviving accounts referred solely to the burning of captured ships after the battle's conclusion. His arguments were adequately answered by Kromayer in 1933, and now most everyone accepts the reports in Plutarch and Dio that Antony burned some ships before the battle (the precise number remains unknown) and that fire was used as an offensive weapon, probably by both sides. A problem still exists with Dio's battle narrative (50.34–35). He says that Octavian reluctantly called for fire from his camp to conclude the battle with a great conflagration that destroyed what remained

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

For Kromayer's defense of his earlier views, see Kromayer 1933, pp. 366–70. For references to the use of fire during the battle, see Horace *Carm.* 1.37.12–13; Vergil *Aen.* 8.694–95; [illegible] Plut. *Ant.* 66.2 and Dio 50.34.1. Cf. as well [illegible] 1976, pp. 45–47.

of Antony's fleet. Few accept the exact truth of this version which may simply be an unfounded flourish developed by Dio to make the battle's conclusion appropriately impressive. On the other hand, it might indicate that in some accounts now lost to us, fire played an important part in the final outcome of the battle.

d. Degree of Destruction

How many of Antony's ships were captured? What were Antony's casualties and how many ships were destroyed?

Since the numbers of casualties and destroyed ships relate directly to the magnitude of the battle, these matters have received particular attention from both sides of the debate. All calculations must be based on two pieces of evidence: Plutarch (Ant. 68.1) and Orosius (6.19.12). Plutarch (who claims to have taken the figure from Augustus' Memoirs) reports that less than 5,000 men were killed and that 300 ships were captured in the battle. Orosius, on the other hand, gives the numbers of 12,000 dead, plus 6,000 wounded (of which an additional 1,000 eventually died); he records no number for captured ships.

Kromayer argued that the casualty totals might roughly indicate the numbers of ships that were destroyed in the battle. If, according to standard Roman practice, the 5,000 dead mentioned by Plutarch represented fighting men only, and if the average ship class in Antony's fleet was a "five," then 5,000 men would correspond to the total loss of fighting men aboard about 40 "fives" (i.e., 40 × 120 men per "five"). Tarn, on the other hand, argued that the casualty figure might refer to everyone on board; rowers included (a total of 420 men on a "five"). Accordingly, he calculated the casualties as equal to the destruction of 11 to 12 "fives" with all hands lost (i.e., 12 × 420 men). As concerns the 12,000 dead recorded by Orosius, J. Leroux has suggested that this number might correspond roughly to the comprehensive casualty total of which Tarn speaks if Orosius' source intended the figure to include

[illegible]

[illegible]

[illegible]

[illegible] (1968), p. 56.

rowers, then it would correspond to the destruction of 30 "fives" with the loss of all hands.

Regardless of which total or calculation we follow, there are serious problems with using these totals to indicate destroyed ships. First, it is obvious that casualties would have occurred aboard ships that were not completely destroyed, particularly on the larger vessels that would have carried more men. Second, because the shore of Cape Actium (held by Antony's army) was so nearby, an alert crewman might swim to safety even though his ship had been destroyed. In other words, it is conceivable that more ships were destroyed than a simple count of the dead might imply. And finally, there is a good chance that Plutarch (seemingly the better source since he claims to have used the *Memoirs of Augustus*) misunderstood Augustus and recorded a total that referred to losses sustained during the entire Actian campaign. If we admit this possibility and conclude, therefore, that a destruction equal to the total loss of 30 ships occurred in the final battle (calculated from Orosius), we are left with a destruction equivalent to a loss of 10 ships for the events leading up the final battle (i.e., Plutarch's 40 minus Orosius' 30). This number seems a bit low, considering the known victories of Agrippa at Methone, Leukas and Patras, and considering that Antony's fleet at Actium was reduced to 170 ships from an original total of some 500 vessels. Clearly, we can place no great trust in these calculations. Nevertheless, as a general means of gauging the minimum degree of destruction involved in the Actian War, the numbers seem roughly equivalent to the total loss of about 40 "fives." Whether or not this destruction occurred mainly on September 2 depends on how one interprets the fragment of Augustus' *Memoirs* preserved by Plutarch (see Section 2.a infra).

e. Military Significance of the Battle

> [illegible] hard fought struggle [illegible] Actium [illegible] by the propaganda of the victors?

One's interpretation of the battle's character depends largely upon which side of the debate one chooses to stand. If we reject the validity

See [illegible] 1983, p. 176 [illegible] [illegible]

[illegible] p. 34.

See supra [illegible]

of the secondary narratives and accept Tarn's interpretation of Horace's *Epode* 9, then most of Antony's fleet returned to harbor without offering battle while Antony and Cleopatra managed to flee southward with 100 ships. At the most, Tarn thought that Antony lost 15 ships, although he later conceded that the number could have been as high as 35 to 40 ships.[2] On the other hand, if we are willing to accept the validity of the secondary narratives, then a consistent picture develops of a hard-fought struggle lasting some four and one-half hours in which perhaps 40 to 50 ships from Antony's fleet were destroyed.[3]

2. *The Evidence from the Campsite Memorial*

Let us now reconsider some of these issues with the design and dedication text of Octavian's Campsite Memorial in mind. Obviously, the monument tells us nothing about Antony's battle strategy, or about the numbers of ships that fought on either side in the final naval battle. It does provide us, however, with some interesting information concerning the fragment of Augustus' *Memoirs* preserved by Plutarch. And this, in turn, may have some important implications for the way we reconstruct the numbers of casualties in the battle.

a. The Numbers of Captured and Destroyed Ships

> Plut. *Ant.* 68.1: [illegible]
>
> There were [illegible] 300 [illegible] captured, as [illegible] himself has written.[4]

If the fleet totals given by Orosius and Florus are correct for the battle of Actium, then Octavian clearly could not have captured 300 ships during the battle, as he apparently claimed in his *Memoirs*. Plutarch (or Plutarch's source) must have misunderstood what Augustus had written. Kromayer saw, years ago, that the misunderstanding probably centered on the word "bellum," which can mean either "battle" or "war" depending on the context in which it is used. Citing Augustus' use of the word "bellum" in *Res Gestae* 25.2 to refer to the entire Actian War, he argued that the word probably had a similar meaning in the *Memoirs*, and that Plutarch (or his source) simply misunderstood the sense in

[2] See Tarn [illegible]

[3] [illegible] We need hardly [illegible] have been a [illegible] battle.

[4] Text and translation come from [illegible] 1920.

which it was utilized. The 300 ship total, he argued, should represent the combined number of all ships captured from the time Octavian crossed to Epirus up until the fall of Alexandria. Tarn criticized Kromayer's argument, but without any lasting effect; most subsequent accounts of the battle have adopted Kromayer's interpretation of the passage.

The dedication text on the Campsite Memorial also uses the word "bellum" in a manner similar to the passage in Plutarch. [illegible] following the victory in the war which he waged on behalf of the Republic in this region"). Octavian has chosen his words carefully: in the broadest sense, he pays honor to Neptune and Mars following the victory he won at Actium. Although the battle on September 2 may have decisively terminated Antony's resistance at Actium, it was only one event in a string of successful engagements. Each of these victories would have been important to Octavian and his men, with each act of bravery and valor worthy of honor and remembrance. For this reason, we think it unlikely that Octavian would have built this monument simply to commemorate the final battle.

If Octavian had intended simply to give thanks for the naval battle fought on September 2, we also believe that he would have avoided using a general phrase like "in hac regione." Something like "ad Actium," "prope Actium," "iuxta Actium," or "extra Actium" would have implied more clearly that only the final battle and not the entire campaign was intended. The same impression is given by the phrase *pace parta terra marique* ("after peace had been secured on land and sea"). Since Octavian proudly implies that the final victory over the enemy was achieved through decisive victories on both land and at sea, it is unlikely that he considered the "war" fought in this region to consist simply of one naval engagement. The natural impression to be gained from the monument's text is that Octavian dedicated here naval spoils taken during the course of the summer's campaign in the entire region of Greece.

If the text of the inscription is taken in conjunction with the size of the ram display, which we interpret as a tithe, we can see what the disputed reference to Augustus' Memoirs must have meant. Unless the 33 to 35 rams displayed on the monument is a lucky coincidence (and

[illegible]

thus not a tithe at all), the 300 ship total must refer to the ships taken in the entire Actian War. And that war must be interpreted as the one "fought in this region." In other words, the total should include ships taken in the battles leading up to and immediately following September 2. Aside from the few ships that may have fallen into Octavian's hands in the first few weeks following the battle, the 300 ship total should not include ships taken outside the region of Greece. These obviously belong to another tally. This reasoning applies as well to the 5,000 dead reported from Augustus' *Memoirs*: these casualties would have been sustained largely in the events leading up to and including the final naval battle on September 2.

This interpretation of Plutarch's text has an impact on how we might compute the minimum number of Antony's ships that were totally destroyed in battle during the Actian War. We have already referred to Plutarch's statement (*Ant.* 61.1) that Antony brought with him "no fewer than 500 fighting ships." The words of Plutarch's text reveal that he believed these vessels physically accompanied their commander to Greece. If the monument preserves an accurate tally, then Octavian captured between 330 and 350 of this 500 total. When we add to the captured ships the 60 that fled with Cleopatra, we are left with at least 90 ships for which we have no record.

This is a number which must accommodate the following possibilities. First, a small number of ships may still have been posted elsewhere, perhaps as escorts to protect transport vessels. Others who may have remained in places which had not been captured by Agrippa may have fled southward to join Antony once they got news of the battle's outcome. How many ships this involved is impossible to determine, but

We arrive at this point [illegible] all losses up to the fall of Alexandria [illegible]

Plut. *Ant.* 61.1 [illegible]

This number [illegible]

We do not know whether [illegible]

From Plutarch [illegible] at Taenarum.

If, on the other hand, some of these ships [illegible] they would have been included among the 300 ships listed as captured during the Actian War.

the number cannot have been very large, or some mention of them would have appeared in the surviving record. Second, these 90 vessels must include those who managed to flee from the battle with Antony. Tarn first argued that some 40 ships escaped with Antony. He may be correct, but there is no real evidence to support or reject this view, and he eventually conceded the number might have been as low as 15 to 20. Third, these 90 ships must include all those destroyed in battles during the course of the summer at Methone, Leukas, Patras and at Actium prior to September 2. Here, too, the number must remain unknown, but we suspect that it cannot have been very large. The complete destruction of a vessel so that it cannot be recovered for salvage is a rare occurrence outside the realm of major battles and storms. No doubt, some vessels were completely destroyed before the final battle, but we should expect some mention of decisive battles in the surviving narratives had the number been large.

Should we include among this 90 ship total the vessels that were burned by Antony before the battle? Most scholars who have considered this question would argue that we should. In other words, they think it unlikely that Octavian would have claimed Antony's burned hulls among his total of captured ships. Although this view seems at first glance to make sense, we find it likely, however, that Octavian would have claimed these burned hulls, with their fire-scarred fittings and scorched rams, as captured ships. Our conclusion is based on the likelihood that the majority of warships seized during the Actian War were eventually burned, thereby ensuring that Antony could never use them again. It is reasonable to expect that Octavian would have made such

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

a fine distinction between the ships destroyed by Antony and those destroyed by himself? Most everyone agrees that Octavian wished to make Actium into a greater battle than it had, in fact, actually been. The real issue centers on the degree of distortion that Octavian brought to bear to achieve his goal. If we admit that Octavian actively promoted the glory of his victory, how can we object to the possibility that he added the burned hulls to his total of captured vessels? In a valid sense he had captured these vessels when he took over the camps once occupied by Antony's fleet and army. Since both the whole and burned ships would have provided Octavian with tangible spoils, what did it matter who had actually applied the torch? The significant fact was simply that Antony's ships had fallen into Octavian's hands, and what may have mattered most in the final tally was the total number of rams that remained, whether they were fire-scarred or not.

If we are correct in this assumption, then the [illegible]-ship total must represent vessels that either managed to escape with Antony or were lost in the battles leading up to and including the one on September 2. The degree of destruction involved during the war, therefore, depends largely upon how many ships one believes fled with Antony. If we accept Tarn's guess of 40 ships (and the number may have been a good deal less than this, as Tarn himself admitted), we are still left with a total of 50 ships that were so badly destroyed that they were unavailable for salvage.[illegible] This number, admittedly a guess, does correspond well to the casualty totals given by Plutarch and Orosius (i.e., 5,000 fighting men or 15,000 men if we include the rowers).

At this point we might do well to consider what actions would be required to damage a ship so completely that it could not be salvaged. There are two possibilities, and both involve the ship's sinking so that it cannot be towed back to shore. A ship can be burned to the waterline and thus sunk, or it can be sunk by ramming.[illegible] Though we cannot be sure how many ships were sunk in the naval battles prior to September 2, the most likely occasion for such a high degree of destruction by fire and ramming would have occurred during the final battle on September 2. As J. R. Johnson remarks, "the battle of Actium approaches the proportions of a real battle ... when one contemplates the total destruction of so many ships."[illegible] The Campsite Memorial is in full agreement with this conclusion.

[illegible]

[illegible]

[illegible]

b. The Composition of Antony's and Cleopatra's Fleet

Can the monument tell us anything truthful about the composition of Antony's and Cleopatra's fleet? Perhaps, but only if we limit our inquiries to the larger classes. We can see clearly from the sockets on the monument that Antony and Cleopatra possessed multiple numbers of their largest warships. If we remember the relatively limited numbers of the large classes in the fleet of Ptolemy II, the totals for the large ships on the Campsite Memorial may correspond closely to the actual numbers existing in Antony's fleet at the beginning of the war.[illegible] This reasoning assumes that Octavian composed his tithe exclusively from the biggest rams he had captured. In other words, if he had captured four "tens," and five "nines," we believe he chose to display them all, rather than to select a token number from each class and thereby present a selection from every class. Only in this way can we explain the irregular totals for the constituent rams of different sizes on the monument. If we are correct in this assumption, the Campsite Memorial preserves the total number, minus one (one example from each class was exhibited in the dekanaia on the Actian promontory), for each of the larger classes in the enemy fleet.

Following either Sequence I or II (Chapter III, Section 2 d.), the fleet of Antony and Cleopatra probably contained at least four and perhaps five "tens" (i.e., the three attested on the Campsite Memorial plus Cleopatra's flagship plus the one in the Actian dekanaia), four "nines," and perhaps five "eights," and six "sevens." And even though the smaller sizes may not represent as closely the original totals in the fleet, we can presume that there were at least eight "sixes" (Sequence II) or perhaps four "sixes," and five "fives" (Sequence I). Admittedly, this attempt to reconstruct the composition of Antony's and Cleopatra's fleet is speculation. We do not know, for example, how many large ships were completely destroyed (and thus not salvaged), nor how many composed the squadron of 60 vessels that managed to escape from the gulf.[illegible] Nevertheless, our conclusions, if not precisely accurate, reveal that the fleet contained multiple numbers of large ships which correspond roughly to the totals we have for the large ships in the fleet of Ptolemy II. Though Octavian might wish us to believe otherwise, the enemy fleet seems to have been less a monstrous collection of immovable "eights" and "tens" than a moderately large Ptolemaic fleet of the late Hellenistic Age.[illegible]

[illegible] According to Athenaeus (5.203d), the fleet of Ptolemy II contained 2 "thirties," 1 "twenty," 4 "thirteens," 2 "twelves," 14 "elevens," 30 "nines," 37 "sevens," 5 "sixes," 17 "fives," and 224 [illegible]

[illegible] For the composition of the squadron, see [illegible]

[illegible]

c. The "Heavy Fleet vs. Light Fleet" Tradition of the Battle

At first glance, the Campsite Memorial appears to support fully the secondary narratives which stress the massive sizes of Antony's ships in comparison to those used by Octavian. No one can question the impressive sizes of the rams that were originally displayed at Octavian's campsite. If our interpretation of the monument is correct, however, we should reexamine this notion of the battle because it may be incorrect or at the very least, misleading.

The secondary accounts are almost unanimous in stressing the unequal nature of the ships that fought against one another in the final battle. Although outnumbered by almost two to one, the immense sizes of Antony's ships more than made up for this apparent inequity. Despite this disadvantage in size, however, Octavian used his smaller ships more effectively and thus the superior seamanship of his crews was able to win the day. But is this what really happened? Did Octavian really win by using masses of smaller, more maneuverable ships against the larger, heavier, and less maneuverable vessels of the enemy? In other words, what is the validity of the "heavy fleet vs. light fleet" tradition that is preserved in most of the secondary battle narratives?

The Campsite Memorial's sockets preserve important information concerning some aspects of Antony's and Cleopatra's fleet. For example, if our arguments concerning the sockets' relative sizes are roughly correct, we know that over 75 percent of the monument's facade was covered with rams from ship classes of "fives" or greater. We also know that Octavian's Campsite Memorial displayed a larger and more massive array of warship rams than appeared on any other known rostral monument in the Mediterranean world. The weapons at his camp literally dwarfed the examples he sent to Rome for mounting in the *Forum Romanum*. As time passed and the standard warship of Roman fleets diminished in size to the "three," these massive weapons supported the dramatic story adopted by all later historians that Antony's Asiatic ships were of extraordinary size when compared to Octavian's Roman vessels. With this theme of Antony's "heavy fleet" versus Octavian's "light fleet," the monument may provide a "new" insight into the process by which the standard battle account developed.

The "heavy fleet vs. light fleet" tradition of the conflict seems to have been a basic element of the battle narrative as early as the end of Augustus' reign. Nevertheless, the tradition is doubtful as a meaningful statement of historical fact. The "light" fleet used by Octavian at Actium was the same one raised by Agrippa in 37 B.C. to defeat Sextus Pompey in Sicily. Dio (50.19.3) reveals this fact in a speech supposedly delivered

Antony embarked for the battle [illegible] and Antony's [illegible] ships [illegible] embarked [illegible] for example [illegible] pp. [illegible]

[illegible] This observation has been made [illegible] for example [illegible] 1931, p. 191; [illegible] 1938, p. 167; and [illegible] 1960, pp. [illegible]

by Antony before the battle. He also shows by his narrative of events in 36 B.C. (49.1.2; 3.2) that this fleet was composed of heavy ships. Appian concurs; he describes the fleet in 36 B.C. as composed of large, heavy vessels which could both give and receive crushing blows. There is no cogent reason, therefore, why Octavian and Agrippa would have abandoned in 31 B.C. a strategy that had proved so effective in 36 B.C. against Pompey.

Dio's inconsistent description of the same fleet as heavy in 36 B.C. and light in 31 B.C. must stem from his reliance on more than one source for these two events. Presuming that Dio was astute enough to recognize the inconsistency, the source which presented Octavian's fleet at Actium as "light" must have been authoritative enough to warrant its use. There is only one source we know of which would have carried such weight, and that is Augustus' own Memoirs (see infra). Additional evidence suggests that through this source Augustus declared that his Liburnians defeated the heavier polyremes of his enemies. How far he exaggerated the overall difference in sizes between the two fleets is difficult to substantiate. But the massive display of his campsite suggests that he planned, soon after his victory, to emphasize one element of this version, namely, the enormous sizes of the enemy's ships.

This observation is supported fully by the literary record beginning immediately after the Battle of Actium. Horace, who wrote a poetic version of the battle (Epod. 9) soon after its conclusion, records no basic difference between the vessels of each fleet, nor is this hinted a year later in his poem celebrating the death of Cleopatra (Carm. 1.37). Since the themes of these two poems would have been well served by the inclusion of this tradition, we can only presume that its absence signifies that the theme was not yet developed. Vergil's description of the two

[illegible]

[illegible]

[illegible]

[illegible]

with elaborate figureheads and painted bows (lines 47–50). Although no direct comparison between the two fleets is drawn, the passage begs for one and leads the reader to conclude that Octavian's ships were not rowed by hundreds of oars nor were they so elaborately decorated.

The first author (after Augustus published his *Memoirs*) to state the "heavy fleet vs. light fleet" theme in unambiguous terms may have been the historian Livy, whose account of Actium was composed toward the end of Augustus' reign. Although our evidence is limited to the brief synopsis of Livy's 132nd book, and although nothing is said specifically about the ship classes in Octavian's fleet, we are told that Antony collected for the war "a naval force as remarkably huge as was his land force" (*ingentibus tam navalibus quam terrestribus copiis*). This same theme is picked up a few years later by Velleius (writing in A.D. 30), whose account is the first surviving one to state specifically that Antony's ships were larger than Octavian's. By the first quarter of the second century, the further elaborations of Florus and Plutarch establish this theme fully as an integral part of the battle narrative.

Dio's account, composed a century later in the first three decades of the third century, reveals the theme at its fullest extent. He tells us that Antony purposefully built larger ships than existed in Octavian's navy in order to beat him (50.23.2–3). As a result, his naval architects constructed only a few "threes" (the standard warship during Dio's lifetime) and focused their efforts on building ships from "fours" to "tens." Shortly before describing the final battle, Dio presents speeches ostensibly delivered by both generals to rouse their troops. And while Antony urged his men to rely on the gigantic bulks of their superior fleet, Octavian explained in detail how the enemy's large ships would actually bring about their own destruction (cf. 29.1–4).

By time of Vegetius in the late fourth century, the theme was inseparable from the rest of the battle narrative. According to him (4.33), Antony was defeated chiefly by means of the Liburnian galleys attached to Octavian's fleet (*Liburnorum auxiliis praecipue victus fuisset Antonius*). Alone, this statement might arouse little curiosity, especially

For the date of the later books of Livy, [illegible] p. 184.

According to Velleius (2.84.1), although Antony's ships were larger than Octavian's, they were [illegible]. [illegible] to be the logical extension of the theme [illegible] Propertius [illegible] (cf. lines 47–50) [illegible] when the latter [illegible] the death of [illegible].

According to Florus (2.21.5–7), [illegible] Antony's ships proved fatal to [illegible] than Antony's [illegible]. Plutarch repeatedly [illegible] that Octavian's ships were smaller and [illegible] Antony's [illegible] ships from "threes" to "tens" [illegible]. Although the ships were taller and heavier than Octavian's, they were [illegible] in the battle because they were undermanned and [illegible].

See the following [illegible]: Dio 50.18.4–6, 19.5, 23.2–3, 29.1–4 and 32.1. For the date of Dio's History, see [illegible] 1964, pp. 28–32.

since Vegetius uses the term "Liburna" to signify all ships smaller than "sixes" (cf. Veg. 4.37). But taken in conjunction with the statements from Horace (*Epode* 1.1–4) and Propertius (3.11.44), we may see the origin of our theme. The accent on the Liburnian galleys, identified with Octavian both before and after the battle, helps to draw attention away from Agrippa and his polyremes and to emphasize the decisive role of Octavian, not Agrippa, as the victorious commander.

The "heavy fleet vs. light fleet" tradition can be broken down into three significant elements: 1) the tradition is noticeably absent from the first poetic versions of the battle; 2) it first appears subtly in the subtle allusions of Propertius during the late 20s and [illegible], and is developed more fully thereafter; and 3) the vessels credited with securing the victory are primarily the Liburnian galleys known to be favored by Octavian. All three elements can be neatly explained by the appearance in the mid-20s B.C. of Augustus' own version of the battle.

Published sometime between the end of the Cantabrian War in 25 B.C. and his departure for Asia in 22 B.C., the *Memoirs* [illegible] the commentary *de vita sua* or the [illegible] as some scholars refer to it, presented Augustus' own account of events up to the end of the recent war in Spain.[illegible] Although a mere 21 fragments of this work remain, we know

[illegible]

[illegible]

it was consulted by Plutarch and Dio, the earliest surviving authors to articulate fully the "heavy fleet vs. light fleet" tradition.[1] Since there are compelling reasons to doubt the strict validity of this tradition, and since it seems not to have been reflected in other authors' works before the oblique allusion of Propertius in the late 20s B.C., it seems plausible that this particular tradition stems from the Memoirs of Augustus.

If this suggestion is correct, it would imply that Dio composed Octavian's pre-battle speech by following the general lines of Octavian's own account, either from the Memoirs or from some intermediate source. Although we cannot conclusively prove this to have been the case, the circumstantial evidence referred to above is impressive, particularly in light of the following observations. First, we have noted that the preserved fragments of this version may help to explain the obvious inconsistencies between Dio's descriptions of Octavian's fleet in 36 B.C. and in 31 B.C. This authority would also help to explain why Dio chose to reinforce this particular theme as a key element in Octavian's speech. Second, Dio certainly knew of Augustus' Memoirs, which he refers to on at least one known occasion (cf. 44.36.1). Third, Plutarch, who consulted the work for at least one aspect of his own battle account, says precisely the same thing as Dio concerning Octavian's strategy of using smaller ships. And finally, if we accept the Campsite Memorial as proper evidence, Octavian especially began to stress an important element of the "heavy fleet vs. light fleet" tradition as long as two years

[1] [illegible]

[illegible]

[illegible]

[illegible]

after the battle—even earlier when we consider that the rams were selected and the plans approved as much as a year before the monument's dedication in August 29 B.C.

Exactly how Augustus worded his version of the battle is impossible to determine, but we can make an educated guess at the general tenor of his narrative if Dio's account (50.23.2–3) has any truth behind it. Antony apparently tried to outbuild Octavian when he prepared his own fleet. The composition of Octavian's Sicilian fleet had been no secret; it was collected openly in 37 B.C. when the two men were still "friends." Indeed, Antony had reluctantly contributed more than 100 ships to swell its numbers, most of which (at least 70) were returned to him after Octavian's defeat of Sex. Pompey. Some of these men, recently discharged from Octavian's fleet, would have had first-hand knowledge of Octavian's naval strength, the sizes of his ships and the numbers of vessels in each class. From 34 B.C. onward, Antony used his newly acquired Armenian wealth (plus help from Cleopatra) to build more polyremes than he knew existed in Octavian's fleet. Although he obviously did not build a fleet composed mainly of "eights" and "tens," it seems reasonable that he tried to surpass both the sizes and numbers of the ships in Octavian's fleet. It also seems reasonable that he sent abroad exaggerated reports of his preparations; the stronger he appeared before war was actually declared, the more willing Octavian should have been to negotiate a settlement.

Since Antony's attempt to outbuild his rival must have been part of the propaganda passing between the hostile camps before the war, Octavian was free to utilize this ready-made theme to his own advantage after the battle's conclusion. Because he did not personally invent the report that Antony's fleet was unusually massive, his version would have been accepted as valid by contemporaries who had heard Antony's propaganda but who had not personally witnessed the battle. The crucial help of the Liburnian galleys would also have neatly shifted the credit for the final victory from Agrippa to Octavian, who was personally identified with this type of vessel. The sailors and marines on the right wing who had actually fought under his personal direction would have been the version's strongest proponents (whether it was strictly true or not) because it would have validated their own heroic role in the final victory. And accounts like the heroic exploits of the Spartan Eurykles (see supra n. 67) which circulated after the battle would have served to

For the ships sent by [illegible] pp. 458 [illegible] with n. 58. Although [illegible] of these ships were not returned to him (Plut. Ant. 35 [illegible] Appian [illegible]) [illegible] that the account is strictly true.

Such was the [illegible] (? [illegible]).

This is [illegible] the [illegible].

The reports of Antony's preparations [illegible] Octavian [illegible]. For the defection of men like Titius and Plancus in 32 B.C. [illegible] provided Octavian with excellent information about Antony's present forces and future plans.

bolster their claims to glory. We have no doubt that Octavian's smaller vessels had somehow proved effective against Antony's polyremes on September 2, 31 B.C. On the other hand, considering the nearly contemporary evidence of Horace, Virgil and Propertius, we can rest assured that the vessels of the two opposing fleets were more alike than they were different.

Is Octavian's account, therefore, a complete lie? Not likely; a lie is most believable when it cannot be distinguished from the truth. Although we still might argue over the precise details of the battle, we must concede that Octavian's self-serving view has some basis in fact. The truth must be that Antony's largest ships were larger than were Octavian's largest ships, and that these ships were packed with marines and put in the center of Antony's front battle line. But was the battle primarily a struggle between ships of unequal size, i.e., between Octavian's "fives" and Antony's "tens"? Did the Caesarian crews display their superior seamanship and maneuverability by breaking through the line and by carrying out the *diekplous* maneuver?[2] A careful reading of the sources closest in time to the battle does not bear this out.

Furthermore, if we are willing to accept that Antony embarked 22,000 men on 170 ships, then the class which predominated must have been the "five" or less, and this is precisely what the greater number of smaller sockets on the monument implies.[3] In general, it seems likely that the battle on September 2 was decided between ships of roughly the same size, except for the fact that Antony's largest ships were larger than were Octavian's. During the breakout of Antony and Cleopatra, the largest ships were unable to disentangle themselves and were mostly left behind to fight and be captured. In the end, the suspicion remains that the "heavy fleet vs. light fleet" tradition has more to do with Antony's propaganda before the war and with Octavian's role as the victorious commander than with the actual tactics of the battle.

Nevertheless, the design of the Campsite Memorial implies that as soon as one year following the battle, Octavian had already begun to formulate his preferred version of the struggle. A few years later, he expressed this version more fully in his *Memoirs*. Primarily through this "unimpeachable source," the theme was passed to subsequent historians, and in the absence of other authoritative accounts it was adopted and embellished as a standard element in all succeeding battle narratives of the conflict. Each fleet at Actium possessed both large and small ships.

---

1 See, for example, [illegible], 1971, p. 14[illegible].

2 For this suggestion, see [illegible] p. 3[illegible], who bases it on the pre-battle rhetoric found in Octavian's speech to his men. Although such a speech may have appeared in the *Memoirs*, its existence does not prove that the *diekplous* was actually used in the final battle.

3 If we conclude mathematically that the average sized ship was a "five," and accept that the advantage of the larger classes was their ability to carry disproportionately large numbers of men on their decks, then, mathematically, we must conclude that classes less than the "five" (the average sized ship, statistically speaking) predominated in actual fact.

But as time passed, two elements emerged to dominate the battle narrative: 1) the enormous sizes of Antony's vessels in comparison to those in Octavian's fleet, and 2) the decisive role of the Liburnian galleys. The moving force behind these distortions of the historical record was none other than Augustus himself. His object, no doubt, was to heroize the conflict and to glorify his own role in the final victory that was to become "the birth-legend in the mythology of the Principate."*

* The quote comes from Syme 1939, p. 275.

CORNELL UNIVERSITY LIBRARY

VII: Conclusion

During the many centuries that followed the Campsite Memorial's dedication, we lose sight of its subsequent history. Its final destruction and abandonment were no doubt connected somehow to the fate of Nikopolis which was probably attacked by Alarich in A.D. 397, occupied by Gaiseric in 475 and sacked by Totila in 551.[1] In response to these attacks, the city's fortifications were rebuilt along a shorter, more defensible line. When exactly this occurred is not securely known, although a piece of church decoration in "late Theodosian style" incorporated into the new circuit at tower 21 suggests that this part of the circuit dates to the late fifth century. By this time, if not sooner, the memorial's rams had probably been wrenched from their sockets for recycling into more modern weapons while its blocks were quarried for use in the new, smaller circuit wall.[2]

At the same time that the rams were removed (if not before) the statues of Eutyches and Nikon were probably removed to Constantinople, since we learn from Zonaras that in his day (the mid twelfth century) the pair stood in the city's hippodrome.[3] If the monument had not been fully cannibalized for the city's Byzantine fortifications during the fifth or sixth century, this had certainly occurred by the year 1040 when the people of Nikopolis called in a Bulgarian force to help them in a tax revolt.[4] The succeeding years saw the city's progressive abandonment as its inhabitants slowly drifted away to other communities. In the meantime, earthquakes spilled the stacked courses of the blocks of the southern retaining wall, a pine forest began to cloak the sides of Mt. Michalitsi, and everyone forgot the original glory of this pretty spot above the crumbling theater and overgrown stadium of the Actian Games.[5]

Now, 75 years after its rediscovery, Octavian's memorial still awaits a complete study of its buried remains. Nevertheless, what has been exposed over the years reveals a surprising amount of new evidence

[1] Schober 1936, [illegible].

[2] For the Byzantine wall of Nikopolis, [illegible] dates the new circuit to the period [illegible]. By the late fifth century, the [illegible] apparently rocked the city in the second [illegible].

[3] Zonaras [illegible].

[4] Schober 1936, [illegible]. By this time the [illegible] of the city was certainly long gone.

[5] Nearby Preveza [illegible] the beginning of the fifteenth century, when Albanians were settled at the entrance to the Ambracian [illegible] p. 775.

concerning Augustus, the Battle of Actium and the massive ships that determined its outcome. We have tried to present all that is currently known about the memorial in order to correct the incomplete and often confusing reports on the site that have appeared in the past. For the first time, we can explain the function of the monument's nave-shaped sockets and use them to recover the true dimensions of the giant ships that fought in the Battle of Actium. The immense scale of the ruins revealed by these sockets astounded and amazed us; we simply had no idea that Greeks and Romans were capable of producing such huge castings.

We have also examined the dedicatory inscription as an integral part of the monument's original design. Its surviving blocks have been illustrated, deciphered, improved and its original placement on the monument conclusively determined. The text of the inscription places the monument's dedication to 29 B.C. It seems reasonable that Octavian himself was present on early August at the ceremony which officially dedicated the city, the monument and the first Actian Games. Details of the site revealed by excavation atop the podium in 1994 have been presented along with the plan originally completed after the project was suspended. This plan plus the photos taken in 1994 reveal the stylobate of the U-shaped stoa originally surrounding Octavian's open air campsite. This foundation helps to resolve the confusion concerning the monument's original appearance and with help from the inscription's text the gods to whom it was dedicated.

The monument's peculiar design supplements the text of the dedication and both together deliver a potent message. We see the simple camp of a pious Roman general whose just cause, virtue and support of the gods enabled him to defeat a force of vastly superior size. The 'package' which delivers this message is both Roman and Greek in form, simple in design, yet executed on a grand scale. The dual character of the design – simple yet somehow majestic – underscores the complex personality of the victor. He, too, displayed a mixture of Roman pragmatic simplicity and Hellenistic imperial grandeur.

Last, but not least, the monument's original number of sockets (ca. 33 to 35) has been interpreted as a tithe of the total of ram's and thus warships captured during the Actian War. If this is so, the monument reveals that Octavian captured 330 to 350 ships from Antony's 500-ship fleet. Discounting the 60 vessels that fled with Cleopatra from the site of the battle, between 90 and 110 ships remain unaccounted for, which implies that the final battle may have been almost as hard fought and drawn out as the sources suggest.

As concerns our observations on the nature of the two fleets that fought in the battle, we have no illusions that they will go unchallenged. The 'heavy fleet vs. light fleet' tradition of the conflict is too deeply rooted in Western literature for us to dislodge it without further discussion. Nevertheless, the new evidence from the Campsite Memorial should force us to rethink certain traditions concerning the battle, what-

over our final conclusions may be. For three-quarters of a century, important evidence for an event which redirected the course of Western history has gone largely unnoticed. The time has now come for this evidence to be carefully considered and discussed.

We do not claim to have answered all the questions concerning Octavian's Campsite Memorial. We have tried to demonstrate, however, the importance of this monument for anyone hoping to understand the battle and the ships that determined its outcome. The side of a hill is certainly an odd place to look for naval vessels, and yet here lie excellent clues, amazingly preserved amid the thorns and thistles where bees still build their hives.

However inadequately we have discussed Octavian's Campsite Memorial in the preceding pages, we hope that its full historical importance will at last be recognized. Though difficult to interpret fully in unambiguous terms, the monument preserves important information about a man of great historical significance and about the timbers of the ships whose clutches he claimed to have saved the Roman world. For these two reasons it ranks among the most important surviving monuments of the Augustan Age. Should our conclusions eventually be rejected or modified, we shall have achieved our goal if the Campsite Memorial is finally included among the major monuments of the Augustan Age and if henceforth its evidence is considered by all who try to understand this important period of world history. Perhaps some day soon, we will return to the site to find out.

STANFORD UNIVERSITY

BIBLIOGRAPHY

[The journal abbreviations utilized in the bibliography are similar to the forms used in *L'Année Philologique*. In all other respects the forms utilized in the notes and text are those of the *Oxford Classical Dictionary*, 2nd ed. Unfortunately, we acquired a copy of L. Basch's exhaustive *Le musée imaginaire de la marine antique* (Athens 1987) too late for its use in this study.]

AMIT 1962: R. Amit, [illegible] (Supplement [illegible]) [illegible] Centre National de la Recherche Scientifique, Paris.
BASCH 1969: L. Basch, "Phoenician Oared Ships," *Mariner's Mirror* [illegible]
BASCH 1975: L. Basch, [illegible] *IJNA* [illegible]
BASCH 1980: L. Basch, [illegible] *Mariner's Mirror* [illegible]
BASCH 1982: L. Basch, "The Athlit Ram: A Preliminary Introduction and Report," *Mariner's Mirror* [illegible]
BAUER [illegible]
BENNETT 1962: [illegible] Cambridge, Mass.
BENNETT 1968: [illegible] New York.
BERLIN 1966: Staatliche Museen Preussischer Kulturbesitz [illegible]
BIERS 1987: W. R. Biers, [illegible] Revised Edition [illegible]
BLAKE 1947: M. E. Blake, [illegible] Washington [illegible]
BOETHIUS [illegible]
BOWERSOCK 1965: G. W. Bowersock, *Augustus and the Greek World*, Oxford.
BROUSKARI 1974: M. Brouskari, [illegible] Athens.
BRUNNSÅKER [illegible]
BRUNEAU [illegible] Paris.
BRUNSMID [illegible]
CAGNAT 1911: R. Cagnat, [illegible]
CARTER 1970: J. M. Carter, [illegible]
CARTER 1977: J. M. Carter, "A New Fragment of Octavian's Inscription at Nicopolis," *ZPE* 24 (1977) 227–30.
CARY 1917: E. Cary, *Dio's Roman History*, Vol. VI, Cambridge, Mass.
CASSON 1971: L. Casson, *Ships and Seamanship in the Ancient World*, Princeton.
CHIPIEZ 1887: [illegible]
CHRONIQUE 1926: "Chronique des fouilles et découvertes archéologiques dans l'Orient Hellénique (1926)," [illegible]
COARELLI 1974: F. Coarelli, [illegible]
COARELLI 1985: F. Coarelli, [illegible] Rome.
COOK 1962: [illegible]
COUCHOUD [illegible] "Le Monument dit des Taureaux à Délos et le culte du Navire Sacré," *BCH* [illegible]
CRUMLIN 1976: [illegible]

CRAWFORD 1974: M. Crawford, *Roman Republican Coinage*. 2 vols. Cambridge.
DEGRASSI 1963: A. Degrassi, *Fasti Anni Numani et Iuliani*. *Inscriptiones Italiae* [illegible] Rome.
[illegible] [illegible] Vol. 1, an unnumbered volume in the series [illegible] Bonn.
[illegible] [illegible] Paris.
EHRENBERG–JONES 1955: V. Ehrenberg and A. H. M. Jones eds., *Documents Illustrating the Reigns of Augustus and Tiberius*. 2nd ed. Oxford.
FERRABINO 1924: A. Ferrabino, "La battaglia d'Azio." *Rivista di Filologia e di Istruzione* [illegible] 433–72.
FORDYCE 1977: C. J. Fordyce, *Virgil, Aeneid VII–VIII*. Oxford.
FROST 1972: H. Frost, "The Discovery of a Punic Ship." *IJNA* 1: 113–17.
FROST 1974: H. Frost et al., "The Punic Wreck in Sicily: Second Season of Excavation." *IJNA* 3: 35–54.
FROST 1975a: H. Frost, "The Ram from Marsala." *IJNA* 4: 219–28.
FROST 1975b: H. Frost, "Comments on a Punic Ram." *Mariner's Mirror* 61: 23–25.
FROST 1981: H. Frost, "The Punic Ship Museum, Marsala: Its Presentation and Some Structural Observations." [illegible]
FROST [illegible]: H. Frost et al., *Lilybaeum (Marsala). The Punic Ship: Final Excavation Report*. [illegible] (1976).
FROST [illegible]: H. Frost, [illegible]
GAGÉ 1936: J. Gagé, "Actiaca." [illegible]
GIULIANI–VERDUCHI 1987: C. F. Giuliani and P. Verduchi, *L'area centrale del Foro Romano*. Vol. 1 [illegible] Università degli studi di Roma la Sapienza. Florence.
[illegible]
[illegible] [illegible]
GROS 1976: P. Gros, *Aurea Templa. Recherches sur l'architecture religieuse de Rome à l'époque d'Auguste*. Rome. Bibliothèque des Écoles Françaises d'Athènes et de Rome.
HANSLIK [illegible]: R. Hanslik, "[illegible] des Aktischen Krieges." *Hermes* [illegible]
HALE [illegible]: [illegible] Warships [illegible]
HAHN [illegible]: [illegible] Selbstbiographie des Kaisers Augustus. [illegible]
HARDIE [illegible]: [illegible] Oxford. Pp. 112–28.
HARRINGTON [illegible]: [illegible] Harrington, "The Battle of Actium—A Study in Historiography." [illegible]
[illegible]
[illegible] [illegible]
HELLENKEMPER 1987: H. Hellenkemper, "Die Stadtmauern von Nikopolis [illegible]" In E. Chrysos ed., *Nikopolis I: Proceedings of the First International Symposium on Nikopolis (23–29 September 1984)*. Preveza. Pp. [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
HOEPFNER 1987: W. Hoepfner, "Nikopolis—Zur Stadtgründung des Augustus." In E. Chrysos ed., *Nikopolis I: Proceedings of the First International Symposium on Nikopolis (23–29 September 1984)*. Preveza. Pp. [illegible]
HOLMES 1928: T. Rice Holmes, *The Architect of the Roman Empire*. Vol. 1. Oxford.
HUBBARD 1974: M. Hubbard, *Propertius*. New York.
JOHNSON 1976: J. R. Johnson, *Augustan Propaganda: The Battle of Actium, Mark An-*

[illegible] the [illegible] Consulares [illegible] Early Imperial Historiography [illegible] Diss. University of California at Los Angeles.

JONES 1924 [illegible] New York.

JONES 1931 [illegible] Cambridge, Mass.

JONES 1957 [illegible]

[illegible]

KIENAST 1982 D. Kienast [illegible]

KIRSTEN-KRAIKER [illegible] 2 vols. Heidelberg.

KIRSTEN [illegible]

KLEINER [illegible] Augustus [illegible]

[illegible]

KRAAY [illegible]

KROMAYER [illegible]

KROMAYER [illegible]

KROMAYER [illegible]

KROMAYER [illegible]

LAROSSE [illegible]

LAMBRECHTS [illegible]

LAMMERT [illegible]

LEAKE [illegible]

LEHMANN [illegible] New York.

[illegible]

LEVI [illegible]

LINDER [illegible]

LINDER-RAMSEY [illegible]

LLOYD 1972 [illegible]

MACKENDRICK [illegible] New York.

MALCOVATI [illegible]

MANNSPERGER [illegible] Tübingen [illegible]

MANSUELLI [illegible]

MCCREDIE [illegible] Samothrace [illegible]

MCDONALD [illegible]

MATTINGLY [illegible] the British Museum. London.

MEIGGS and LEWIS 1969 R. Meiggs and D. Lewis, eds. A Selection of Greek Historical Inscriptions to the End of the Fifth Century B.C. Oxford.
MILLAR 1964 F. Millar, A Study of Cassius Dio. Oxford.
MOMMSEN [illegible] Th. Mommsen, [illegible]
MOMMSEN 1887 Th. Mommsen, The Provinces of the Roman Empire from Caesar to Diocletian. Trans. W.P. Dickson. Vol. I. New York.
MORRISON and WILLIAMS 1968 J.S. Morrison and R.T. Williams, Greek Oared Ships 900–322 B.C. Cambridge.
MORRISON 1979 J.S. Morrison, "The First Triremes," Mariner's Mirror 65: [illegible]
MORRISON 1984 J.S. Morrison, "Some Problems of Trireme Reconstruction," IJNA 13: [illegible]
MORRISON and COATES 1986 J.S. Morrison and J.F. Coates, The Athenian Trireme: The History and Reconstruction of an Ancient Greek Warship. Cambridge.
MURRAY 1982 W.M. Murray, The Coastal Sites of Western Akarnania: A Topographical-Historical Survey. Diss. University of Pennsylvania.
MURRAY 1985 W.M. Murray, "The Weight of Trireme Rams and the Price of Bronze in Fourth-Century Athens," GRBS 26: [illegible]
MURRAY 1987 W.M. Murray, "Do Modern Winches Equal Ancient Rams?" Mediterranean Historical Review 2: [illegible]
MURRAY forthcoming W.M. Murray, "The Provenience and Date of the Athlit Ram: The Evidence of the Analysis," [illegible]
M[illegible]
NASH 1968 E. Nash, Pictorial Dictionary of Ancient Rome. 2nd ed. Vol. 2. New York.
N[illegible]
O[illegible]
O[illegible]
OLIVER [illegible]
ORMEROD [illegible]
PA[illegible]
P[illegible]
PETER [illegible] H. Peter, [illegible] Vol. II. Leipzig.
PETSAS [illegible] Ph. Petsas, [illegible] with plates [illegible]
PETSAS [illegible]
PHILADELPHEUS [illegible] A. Philadelpheus, "Anaskaphai Nikopoleos," [illegible]
PHILADELPHEUS [illegible] A. Philadelpheus, "Anaskaphai Nikopoleos," [illegible]
PHILADELPHEUS [illegible]
PHILADELPHEUS [illegible]
PICARD [illegible]
PICARD [illegible] Ch. Picard, [illegible]
PLATNER and ASHBY 1929 S.B. Platner and T. Ashby, A Topographical Dictionary of Ancient Rome. London.
POMEY [illegible] P. Pomey, [illegible] Mariner's Mirror [illegible]
POLLINI forthcoming J. Pollini, "Man or God: Divine Assimilation and Imitation in the Late Republic and Early Principate," In Between Republic and Empire: Interpretations of Augustus and his Principate. Berkeley.
PRITCHETT [illegible] W.K. Pritchett, The Greek State at War. Part [illegible] Berkeley.
PURCELL 1987 N. Purcell, "The Nicopolitan Synoecism and Roman Urban Policy," In [illegible] Chrysos, ed. Nikopolis I: [illegible] Preveza. Pp. [illegible]
RABAN [illegible] A. Raban, "Recent Maritime Archaeological Research in Israel," IJNA [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

STARR [illegible]

[illegible]

[illegible]

[illegible]

TARN [illegible]

TARN [illegible]

TARN [illegible]

TARN [illegible]

TARN [illegible]

TARN [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

WARMINGTON [illegible]

[illegible]

[illegible]

WILLIAMS [illegible]

ZANKER [illegible] Ann Arbor.

ZIMMERMANN [illegible] Berlin. [illegible]

ARCHIVE COPY

INDEX OF MODERN AUTHORS

R. Arne 101
P. Anastasi 88

L. Bardi 21, 93, 96, 105, 106
H. Bauer 120
C. E. Bennett 144, 145
W. R. Berg 86
M. J. Blake 29, 58
A. Boëthius and J.B. Ward Perkins 86
G. W. Bowersock 107
S. R. K. Broughton 114
M. Burrows 131
P. Bruneau and J. Ducat 1, 2
P. A. Brunt and J.M. Moore 134

R. Cagnat 92
J.M. Carter 2, 32, 38, 39, 62, 66, 72, 73, 74, 76, 77, 112, 113
J. Cary 126
L. Casson (see also J.R. Steffy) 88, 96, 97, 99, 100, 105, 109, 111, 116, 132, 150
E. Chapot 117
L. Castrilla 117, 118, 120, 121, 122
A. Cook 82
P. L. Cornford and F. [illegible] 128
M. Crawford 120

A. Degrassi 126, 128

V. Ehrenberg and A.H.M. Jones 6, 77, 111, 128

A. Ferrabino 2, 131, 133
C.J. Fordyce 115
H. Frost 21, 78, 103

J. Gagé 2, 5, 11, 12, 14, 15, 16, 17, 67, 86, 87, 125, 128, 130
C. J. Goldham and P. Verdicchio 108, 125, 121
E. Gjerstad 117, 119
A. S. F. Gow and D.L. Page 10

C. Habicht 5
J.W. Hagy 101
H. Hahn 148

[illegible] 1, 2, 132, 137, 138
[illegible] 98
W. [illegible] 78
[illegible]
[illegible]
W. [illegible] 12, 78, 127
J. [illegible] 127, 128
M. Holland 14

J.R. Johnson 1, 2, 100, 132, 133, 136, 138, 139, 147, 116, 146, 141
[illegible]
[illegible]
[illegible]

[illegible] 125, 135, 141, 150
E. Kirsten and W. Kraiker 1, 17, 18, 18
[illegible]
[illegible]
[illegible]
J. Kromayer 2, 125, 132, 137, 138, 139 [illegible] 158, 159, 161, 161, 169

[illegible]
[illegible] 85
[illegible] 42
M. M. [illegible] 11
[illegible] 42
[illegible] 2, 132, 133, 134, 135, 136, 138 [illegible]
[illegible]
[illegible] 21, 87, 106
[illegible] Rawson 23
[illegible]

H. Mattingly 1, 2, 147, 148
B. [illegible] 131, 148
[illegible] 115
A.H. McDonald 148
F. Millar and [illegible] 42
F. Millar 146, 148
Th. Mommsen 4, 5
J.S. Morrison 92, 108
J.S. Morrison and J.F. Coates 95, 96, 97
J.S. Morrison and R.T. Williams 96

W. M. Mattas 11, 21, 57, [illegible] 108, 127, 128
[illegible] Mesozoic [illegible]

[illegible] Nore [illegible]

M. [illegible] 8, 12, 18 [illegible]

[illegible] 18, 62, 76
H. [illegible] 108

M. [illegible] 2, 132, 133, 148
B. [illegible] 137
[illegible]
[illegible] 62, 64
[illegible] 18 [illegible] 62 [illegible]
[illegible]
[illegible] 17, 21, 41, 42 [illegible]
[illegible] 115
[illegible] 114
[illegible] 122
W. [illegible]
[illegible]

[illegible]
[illegible] 125
[illegible] 112
[illegible]
[illegible]
[illegible] 132, 133, 138, 139 [illegible]
[illegible] 124
[illegible] 14

[illegible] 8, 12, 129
[illegible] 127, 128, 114
[illegible]
[illegible] 92
[illegible] 122
[illegible] 12
[illegible] 133, 135
[illegible]
[illegible]
[illegible] 110, 117, 122, 125
[illegible] 127, 137 [illegible]

W. W. [illegible] 110, 121, 131 [illegible] 134 [illegible] 137, 138, 140 [illegible]
H. [illegible] 117, 123
[illegible]
H. [illegible] and [illegible] 92
[illegible] 12
[illegible]
[illegible]

H. [illegible] 129

[illegible] 117
[illegible]
[illegible] 110
[illegible] 110

[illegible] 101, 112, 117, 125, 127
[illegible]

[illegible] LIBRARIES

GENERAL INDEX

Campus Martius [illegible]
Cannae [illegible]
Cantabrian War 147
Cape [illegible]
capital of the Campania Mercurialis [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]
Dardanus [illegible] 123, 186, 117
[illegible] 126

[illegible] 175
Egypt 72, 126, 127, [illegible]
[illegible]
[illegible]
[illegible]
[illegible] 142
[illegible]
[illegible]
[illegible] of the Campania Mercurialis [illegible]
[illegible]

[illegible]

keel 100
keelson 100
kos 96, 116

Lake Trasimenus 95
Leukas 5, 125, 134, 136, 139, [illegible]
Liburna 147
Liburnian galleys [illegible] 144, 145, 146, 147, 149, 151
Lollius Palicanus 119, 120
[illegible] 148

[illegible] 42, 43, 44, 55
Macedonia [illegible] 125
Maecenas [illegible] 144
[illegible] 117, 118
[illegible] 116
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] 109

[illegible] 121, 122
[illegible]
[illegible] 117
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
Neptune [illegible]
[illegible]
[illegible] 121
[illegible]
[illegible]
[illegible]

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 142
[illegible] 142
[illegible]
[illegible] 114, 140
[illegible]

[illegible] 120
[illegible]
[illegible] 121, 124
[illegible]

[illegible]
[illegible]

[illegible]
[illegible]

INDEX OF ANCIENT CITATIONS

Dio 54.28.2 125
Dio 54.31.2–4 125
[illegible]

Theb. 2.92-5 [illegible] 115
Theb. 6.[illegible] 128
Theb. [illegible] 146
Varro [illegible] 129
Varro [illegible] 124
Verg. 4.[illegible] 145, 146
Verg. 4.[illegible] 147
Vell. 2.61.3 [illegible] 125, 126
Vell. 2.[illegible] 2, [illegible] 138, 139, 146
Vell. 2.[illegible] 2
Vell. 2.[illegible] 7
Vell. 2.[illegible] 123
Vell. 2.[illegible] 146
Verg. [illegible] 145
Verg. [illegible] 134
Verg. [illegible] 2, 144-45
Zosimus [illegible] 8, 10, 72, 153
Zosimus [illegible] 95

Descriptions

[illegible] 77
[illegible]
[illegible]
pp. [illegible] 227
[illegible]
[illegible]
[illegible] 128
[illegible]
[illegible]
[illegible] 128
[illegible] 129
[illegible] 115
[illegible] 115
[illegible] 96
[illegible] 115
[illegible]
[illegible]
[illegible] 77
[illegible]
[illegible] 115

PUBLICATIONS

The American Philosophical Society

ARCHIVO GENERAL DE LA NACIÓN


3 1142 01507 8465

DATE DUE	DATE DUE
DUE DATE RETURNED MAY 29 2012 NYU IFA Library	MAR 2 [illegible] MAY 19 [illegible] DUE DATE RETURNED JUN - 1 2017 BOBST LIBRARY CIRCULATION NYU SAW Library
MAY 1 [illegible] MAR 2 [illegible] CIRC CIRC	